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Privately financed infrastructure projects: draft chapters of a legislative guide on privately financed infrastructure projects

Report of the Secretary-General

Addendum

IV. Construction and operation of infrastructure

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Legislative recommendations

For host countries wishing to promote privately financed infrastructure projects it is recommended that the following principles be implemented by the law:

General provisions on the project agreement (see paras. 1-11)

Recommendation 39. The law might identify the core terms to be provided in the project agreement, which may include those terms referred to in recommendations _____ below.

Recommendation 40. Unless otherwise provided, the project agreement is governed by the law of the host country.

Organization of the concessionaire (see paras. 12-18)

Recommendation 41. The contracting authority should have the option to require that the selected bidders establish an independent legal entity with a seat in the country.

Recommendation 42. The project agreement should specify the minimum capital of the project company and the procedures for obtaining the approval of the contracting authority to its statutes and by-laws of the project company and fundamental changes therein.

The project site, assets and easements (see paras. 19-32)

Recommendation 43. The project agreement should specify, as appropriate, which assets will be public property and which assets will be the private property of the concessionaire. The project agreement should further identify which assets the concessionaire is required to transfer to the contracting authority or to a new concessionaire upon expiry or termination of the project agreement; which assets the contracting authority, at its option, may purchase from the concessionaire; and which assets the concessionaire may freely remove or dispose of upon expiry or termination of the project agreement.

Recommendation 44. The contracting authority should assist the concessionaire in the acquisition of easements needed for the operation, construction and maintenance of the facility. The law might empower the concessionaire to enter upon, transit through, do work or fix installations upon property of third parties, as required for the construction and operation of the facility.

Financial arrangements (see paras. 33-51)

Recommendation 45. The law should enable the concessionaire to collect tariffs or user fees for the use of the facility or the services it provides. The project agreement should provide for methods and formulas for the adjustment of those tariffs or user fees.

Recommendation 46. Where the tariffs or fees charged by the concessionaire are subject to external control by a regulatory agency, the law should set forth the mechanisms for periodic and extraordinary revisions of the tariff adjustment formulas.

Recommendation 47. The contracting authority should have the power, where appropriate, to agree to make direct payments to the concessionaire as a substitute for, or in addition to, service charges to be paid by the users or to enter into commitments for the purchase of fixed quantities of goods or services.

Security interests (see paras. 52-61)

Recommendation 48. The concessionaire should be responsible for raising the funds required to construct and operate the infrastructure facility and, for that purpose, should have the right to secure any financing required for the project with a security interest in any of its property, with a pledge of shares of the project company, with a pledge of the proceeds and receivables arising out of the concession or with other suitable security, without prejudice to any rule of law that might prohibit the creation of security interests in public property in the possession of the concessionaire.

Assignment of the concession (see paras. 62 and 63)

Recommendation 49. The project agreement should set forth the conditions under which the contracting authority might give its consent to an assignment of the concession, including the acceptance by the new concessionaire of all obligations under the project agreement and evidence of the new concessionaire's technical and financial capability as necessary for providing the service. The concession should not be assigned to third parties without the consent of the contracting authority.

Transfer of controlling interest in the project company (see paras. 64-68)

Recommendation 50. The transfer of a controlling interest in the capital of a concessionaire company may require the consent of the contracting authority.

Construction works (see paras. 69-79)

Recommendation 51. The project agreement should set forth the procedures for the review and approval of construction plans and specifications by the contracting authority, the contracting authority's right to monitor the construction of, or improvements to, the infrastructure facility, the conditions under which the contracting authority may order variations in respect of construction specifications and the procedures for testing and final inspection, approval and acceptance of the facility, its equipment and appurtenances.

Operation of infrastructure (see paras. 80-97)

Recommendation 52. The project agreement should set forth, as appropriate, the extent of the concessionaire's obligations to ensure:

(a) The adaptation of the service so as to meet the actual demand for the service;

(b) The continuity of the service;

(c) The availability of the service under essentially the same conditions to all users;

(d) The non-discriminatory access, as appropriate, of other service providers to any public infrastructure network operated by the concessionaire.

Recommendation 53. The project agreement should set forth:

(a) The extent of the concessionaire's obligation to provide the contracting authority or a regulatory agency, as appropriate, with reports and other information on its operations;

(b) The procedures for monitoring the concessionaire's performance and for the taking of such reasonable actions as the contracting authority or a regulatory agency may find appropriate, to ensure that the infrastructure facility is properly operated and the services are provided in accordance with the applicable legal and contractual requirements.

Recommendation 54. The concessionaire should have the right to issue and enforce rules governing the use of the facility, subject to the approval of the contracting authority or a regulatory agency.

General contractual arrangements (see paras. 98-150)

Recommendation 55. The contracting authority may reserve the right to review and approve major contracts to be entered into by the concessionaire, in particular contracts with the concessionaire's own shareholders or related persons. The contracting authority's approval should not normally be withheld except where the contracts contain provisions inconsistent with the project agreement or manifestly contrary to the public interest or to mandatory rules of a public law nature.

Recommendation 56. The concessionaire and its lenders, insurers and other contracting partners should be free to choose the law applicable to govern their contractual relations, except where such a choice would violate the host country's public policy.

Recommendation 57. The project agreement should set forth:

(a) The forms, duration and amounts of the guarantees of performance that the concessionaire may be required to provide in connection with the construction and the operation of the facilities;

(b) The insurance policies that the concessionaire may be required to maintain;

(c) The compensation to which the concessionaire may be entitled following the occurrence of legislative changes or other changes in the economic or financial conditions that render the performance of the obligation substantially more onerous than originally foreseen. The project agreement should further provide mechanisms for revising the terms of the project agreement following the occurrence of any such changes;

(d) The extent to which either party may be exempt from liability for failure or delay in complying with any obligation under the project agreement owing to circumstances beyond their reasonable control;

(e) Remedies available to the contracting authority and the concessionaire in the event of default by the other party.

Recommendation 58. The project agreement should set forth the circumstances under which the contracting authority may temporarily take over the operation of the facility for the purpose of ensuring the effective and uninterrupted delivery of the service in the event of serious failure by the concessionaire to perform its obligations.

Recommendation 59. The contracting authority should be authorized to enter into agreements with the lenders providing for the appointment, with the consent of the contracting authority, of a new concessionaire to perform under the existing project agreement if the concessionaire seriously fails to deliver the service required or if other specified events occur that could justify the termination of the project agreement.

Notes on the legislative recommendations

A. General provisions of the project agreement

1. The "project agreement" between the contracting authority and the concessionaire is the central contractual document in an infrastructure project. The project agreement defines the scope and purpose of the project as well as the rights and obligations of the parties; it provides details on the execution of the project and sets forth the conditions for the operation of the infrastructure or the delivery of the relevant services. Project agreements may be contained in a single document or may consist of more than one separate agreement between the contracting authority and the concessionaire. This section discusses the relation between the project agreement and the host country's legislation on privately financed infrastructure projects. It also discusses procedures and formalities for the conclusion and entry into force of the project agreement.

1. Legislative approaches

2. Domestic legislation often contains provisions dealing with the content of the project agreement. In some countries, the law merely refers to the need for an agreement between the concessionaire and the contracting authority, while the laws of other countries contain extensive mandatory provisions concerning the content of clauses to be included in the agreement. An intermediate approach is taken by those laws which list a number of issues that need to be addressed in the project agreement without regulating in detail the content of its clauses.

3. General legislative provisions on certain essential elements of the project agreement may serve the purpose of establishing a general framework for the allocation of rights and obligations between the parties. They may be intended to ensure consistency in the treatment of certain contractual issues and to provide guidance to the public authorities involved in the negotiation of project agreements at different levels of government (national, provincial or local). Such guidance may be found particularly useful by contracting authorities lacking experience in the negotiation of project agreements. Lastly, legislation may sometimes be required so as to provide the contracting authority with the power to agree on certain types of provisions.

4. However, general legislative provisions dealing in detail with the rights and obligations of the parties might deprive the contracting authority and the concessionaire of the necessary flexibility to negotiate an agreement that takes into account the needs and particularities of a specific project. Therefore, it is advisable to limit the scope of general legislative provisions concerning the project agreement to those strictly necessary, such as, for instance, provisions on matters for which prior legislative authorization might be needed or those which might affect the interests of third parties or provisions relating to essential policy matters on which variation by agreement is not admitted.

2. The law governing the project agreement

5. Statutory provisions on the law applicable to the project agreement are not frequently found in domestic legislation on privately financed infrastructure projects. Where they do appear, they usually provide for the application of the laws of the host country by a general reference to domestic law or by mentioning special statutory or regulatory texts that apply to

the project agreement. In some legal systems there may be an implied submission to the laws of the host country, even in the absence of a statutory provision to that effect.

6. The law governing the project agreement includes the rules contained in laws and regulations of the host country related directly to privately financed infrastructure projects, where specific legislation on the matter exists. The main elements of those laws have been considered in previous chapters of the *Guide*. In some countries the project agreement may be subject to administrative law, while in others the project agreement may be governed by private law (see chap. VII, "Other relevant areas of law", ___). The governing law also includes legal rules of other fields of law that apply to the various issues that arise during the execution of an infrastructure project (see chap. VII, "Other relevant areas of law", ___). Some of those rules may be of an administrative or other public law nature and their application in the host country may be mandatory, such as those dealing with environmental protection measures and health and labour conditions. Some domestic laws expressly identify the matters that are subject to rules of mandatory application. However, a number of issues arising out of the project agreement or the operation of the facility may not be the subject of mandatory rules of a public law nature. This is typically the case of most contractual issues arising under the project agreement (for example, formation, validity and breach of contract, including liability and compensation for breach of contract and wrongful termination).

7. Host countries wishing to adopt legislation on privately financed infrastructure projects where no such legislation exists may need to address the various issues raised by such projects in more than one statutory instrument. Other countries may wish to introduce legislation dealing only with certain issues that have not already been addressed in a satisfactory manner in existing laws and regulations. For instance, specific legislation on privately financed infrastructure projects could establish the particular features of the procedures to select the concessionaire and refer, as appropriate, to existing legislation on the award of government contracts for details on the administration of the process. By the same token, when adopting legislation on privately financed infrastructure projects, host countries may need to repeal the application of certain laws and regulations that, in the view of the legislature, constitute obstacles to their implementation.

8. For purposes of clarity, it may be useful to provide information to potential investors concerning those statutory and regulatory texts which are directly applicable to the execution of privately financed infrastructure projects and, as appropriate, those whose application has been repealed by the legislature. However, as it would not be possible to list exhaustively in the law all the statutes or regulations of direct or subsidiary relevance for privately financed infrastructure projects, such a list might best be provided in a non-legislative document, such as a promotional brochure or general information provided to bidders with the request for proposals (see chap. III, "Selection of the concessionaire", para. 60).

3. Conclusion of the project agreement

9. For projects as complexas infrastructure projects, it is not unusual for several months to elapse in the final negotiations (see chap. III, "Selection of the concessionaire", paras. 83 and 84) before the parties are ready to sign the project agreement. Additional time may also be needed in order to accomplish certain formalities that are often prescribed by law, such as approval of the project agreement by a higher authority. The entry into force of the project agreement or of certain categories of project agreement is in some countries subject to an act of parliament or even the adoption of special legislation. Given the cost entailed by delay in the implementation of the project agreement, it is advisable to find ways of expediting the final negotiations in order to avoid unnecessary delay in the conclusion of the project agreement.

10. A number of factors have been found to cause delay in negotiations, such as inexperience of the parties, poor coordination between different public authorities, uncertainty as to the extent of governmental support and difficulties in establishing security arrangements acceptable to the lenders. The Government may make a significant contribution by providing adequate guidance to negotiators acting on behalf of the contracting authority in the country. The clearer the understanding of the parties as to the provisions to be made in the project agreement, the greater the chances that the negotiation of the project agreement will be conducted successfully. Conversely, where important issues remain open after the selection process and little guidance is provided to the negotiators as to the substance of the project agreement, there may be considerable risk of costly and protracted negotiations as well as of justified complaints that the selection process was not sufficiently transparent and competitive (see also chap. III, "Selection of the concessionaire", paras. 83 and 84).

11. The procedures for conclusion and entry into force of the project agreement should also be reviewed with a view to expediting matters and avoiding the adverse consequences of delays in the project's timetable. In some countries the power to bind the contracting authority or the Government, as appropriate, is delegated in the relevant legislation to designated officials, so that the entry into force of the project agreement occurs upon signature or upon the completion of certain formalities, such as publication in the official gazette. In countries where such a procedure would not be feasible or where final approvals by another entity may still be required, it would be desirable to consider streamlining the approval procedures. Where such procedures are perceived as arbitrary or cumbersome, the Government may be requested to provide sufficient guarantees to the concessionaire and the lenders against such risk (see chap. II, "Project risks and government support", paras. 45-50). In some countries where approval requirements exist, contracting authorities have sometimes been authorized to compensate the selected bidder for costs incurred during the selection process and in preparations for the project, should final approval be withheld for reasons not attributable to the selected bidder.

B. Organization of the concessionaire

12. Certain requirements concerning the organization of the concessionaire are often found in domestic legislation and are elaborated upon by detailed provisions in project agreements. They typically deal with issues such as the establishment of the concessionaire as a legal entity, its capital, scope of activities, statutes and by-laws. In most cases, the selected bidders establish a project company as an independent legal entity with its own juridical personality, which then becomes the concessionaire under the project agreement. A project company established as an independent legal entity is the vehicle typically used for raising financing under the project finance modality (see "Introduction and background information on privately financed infrastructure projects", para. 54). Its establishment facilitates coordination in the execution of the project and provides a mechanism for protecting the interests of the project, which may not necessarily coincide with the individual interests of all of the project promoters. This aspect may be of particular importance where significant portions of the services or supplies required by the project are to be provided by members of the project consortium.

13. The project company is usually required to be established within a reasonably short period after the award of the project. Since a substantial part of the liabilities and obligations of the concessionaire, including long-term ones (project agreement, loan and security agreements and construction contracts), are usually agreed upon at an early stage, the project may benefit from being independently represented at the time those instruments are negotiated.

However, firm and final commitments by the lenders and other capital providers cannot reasonably be expected to be available prior to the final award of the concession.

14. Entities providing public services are often required to be established as legal entities under the laws of the host country. This requirement reflects the legislature's interest to ensure, *inter alia*, that public service providers comply with domestic accounting and publicity provisions (such as publication of financial statements or requirements to make public certain corporate acts). However, this emphasizes the need for the host country to have adequate company laws in place (see chap. VII, "Other relevant areas of law", ___). The ease with which the project company can be established, with due regard to reasonable requirements deemed to be of public interest, may help to avoid unnecessary delay in the implementation of the project.

15. Another important issue concerns the equity investment required for the establishment of the project company. The contracting authority has a legitimate interest in seeking an equity level that ensures a sound financial basis for the project company and guarantees its capability to meet its obligations. However, as the total investment needed as well as the ideal proportion of debt and equity capital vary from project to project, it may be undesirable to provide a legislative requirement of a fixed sum as minimum capital for all companies carrying out infrastructure projects in the country. The contracting authority might instead be given more flexibility to arrive at a desirable amount of equity investment commensurate with the project's financial needs. For instance, the expected equity investment might be expressed as a desirable ratio between debt and equity in the request for proposals and might be included among the evaluation criteria for financial and commercial proposals, so as to stimulate competition among the bidders (see chap. III, "Selection of the concessionaire", paras. 75 and 76).

16. In any event, it is advisable to review legislative provisions or regulatory requirements relating to the organization of the concessionaire so as to ensure their consistency with international obligations assumed by the host country. Provisions that restrict or require specific types of legal entity or joint venture through which a service supplier may supply a service and limitations on the participation of foreign capital in terms of a maximum percentage limit on foreign share-holding or the total value of individual or aggregate foreign investment may be inconsistent with specific obligations undertaken by the signatory States of certain international agreements on economic integration or the liberalization of trade in services.

17. Domestic laws sometimes contain provisions concerning the scope of activities of the project company, requiring, for instance, that they be limited to the development and operation of a particular project. Such restrictions may serve the purpose of ensuring the transparency of the project's accounts and preserving the integrity of its assets, by segregating the assets, proceeds and liabilities of this project from those of other projects or other activities not related to the project. Also, such a requirement may facilitate the assessment of the performance of each project since deficits or profits could not be covered with, or set off against, debts or proceeds from other projects or activities.

18. The contracting authority might also wish to be assured that the statutes and by-laws of the project company will adequately reflect the obligations assumed by the company in the project agreement. For this reason, project agreements sometimes provide that the entry into force of changes in the statutes and by-laws of the project company is effective upon approval by the contracting authority. Where the contracting authority or another public authority participates in the project company, provisions are sometimes made to the effect that certain decisions necessitate the positive vote of the contracting authority in the meeting of the shareholders or board. In any event, it is important to weigh the public interests represented through the contracting authority against the need to afford the project company the flexibility

necessary for the conduct of its business. Where it is deemed necessary to require the contracting authority's approval to proposed amendments to the statutes and by-laws of the project company, it is advisable to limit such a requirement to cases concerning provisions deemed to be of fundamental importance (for example, amount of capital, classes of shares and their privileges or liquidation procedures), which should be identified in the project agreement.

C. The project site, assets and easements

19. Provisions relating to the site of the project are an essential part of most project agreements. They typically deal with issues such as the acquisition of the required land, title to land and project assets, and easements required by the concessionaire to carry out works or to operate the infrastructure. To the extent that the project agreement contemplates transfer of public property to the concessionaire or the creation of a right of use regarding public property, prior legislative authority may be required. Legislation may also be needed to facilitate the acquisition of the required property oreasements when the project site is not located on public property.

1. Acquisition of land required for execution of the project

20. Where a new infrastructure facility is to be built on public land (that is, land owned by the contracting authority or another public authority) or an existing infrastructure facility is to be modernized or rehabilitated, it will normally be for the owner of such land or facility to make it available to the concessionaire. The situation is more complex when the land is not already owned by the contracting authority and needs to be purchased from its owners. In most cases, the concessionaire would not be in the best position to assume responsibility for purchasing the land needed for the project, in view of the potential delay and expense involved in negotiations with a possibly large number of individual owners and, as may be necessary in some jurisdictions, to undertake complex searches of title deeds and review of chains of previous property transfers so as to establish the regularity of the title of individual owners. It is therefore typical for the contracting authority to assume responsibility for providing the land required for the implementation of the project, so as to avoid unnecessary delay or increase in project cost as a result of the acquisition of land. The contracting authority may purchase the required land from its owners or, if necessary, acquire it compulsorily.

21. The procedure whereby private property is compulsorily acquired by the Government against the payment of appropriate compensation to the owners, which is referred to in domestic legal systems by various technical expressions, such as "expropriation", is referred to in the present *Guide* as "compulsory acquisition". In countries where the law contemplates more than one type of procedure for compulsory acquisition, it may be desirable to authorize the competent public authorities to carry out all acquisitions required for privately financed infrastructure projects pursuant to the most efficient of those procedures, such as the special procedures that in some countries apply for reasons of compelling public need (see chap. VII, "Other relevant areas of law", ___).

22. The power to acquire property compulsorily is usually vested in the Government, but the laws of a number of countries also authorize infrastructure operators or public service providers (such as railway companies, electricity authorities or telephone companies) to perform certain actions for the compulsory acquisition of private property required for providing or expanding their services to the public. In those countries in particular where the award of compensation to the owners of the property compulsorily acquired is adjudicated in court proceedings, it has

been found useful to delegate to the concessionaire the authority to carry out certain acts relating to the compulsory acquisition, while the Government remains responsible for accomplishing those acts which, under the relevant legislation, are preconditions to the initiation of the acquisition proceedings. Upon acquisition, the land often becomes public property, although in some cases the law may authorize the contracting authority and the concessionaire to agree on a different arrangement, taking into account their respective shares in the cost of acquiring the property.

2. Ownership of project assets

23. As indicated earlier, private sector participation in infrastructure projects may be devised in a variety of different forms, ranging from publicly owned and operated infrastructure to fully privatized projects (see "Introduction and background information on privately financed infrastructure projects", paras. 47-53). Irrespective of the host country's general or sectoral policy, it is important that the ownership regime of the various assets involved be clearly defined and based on sufficient legislative authority. However, there may be no compelling need for detailed legislative provisions on this matter. In various countries it was found sufficient to provide legislative guidance as to matters that need to be addressed in the project agreement.

24. In some legal systems, physical infrastructure required for the provision of public services is generally regarded as public property, even where it was originally acquired or created with private funds. This would typically include any property especially acquired for the construction of the facility in addition to any property that might have been made available to the concessionaire by the contracting authority. However, during the life of the project the concessionaire may make extensive improvements or additions to the facility. It may not always be easily ascertainable under the applicable law whether or not such improvements or additions become an integral part of the public assets held in possession by the concessionaire or whether some of them may be separable from the public property held by the concessionaire and become the concessionaire's private property. It is therefore advisable for the project agreement to specify, as appropriate, which assets will be public property and which will become the private property of the concessionaire.

25. The need for clarity in respect of ownership of project assets is not limited to legal systems where physical infrastructure required for the provision of public services is regarded as public property. Generally, where the contracting authority provides the land or facility required to execute the project, it is advisable for the project agreement to specify, as appropriate, which assets will remain public property and which will become the private property of the concessionaire. The concessionaire may either receive title to such land or facilities or be granted only a leasehold interest or the right to use the land or facilities and build upon it, in particular where the land remains public property. In either case, the nature of the concessionaire's rights should be clearly established, as this will directly affect the concessionaire's ability to create security interests in project assets for the purpose of raising financing for the project (see paras. 54 and 55).

26. In addition to the ownership of assets during the duration of the concession period, it is important to consider the ownership regime upon expiry or termination of the project agreement. In some countries the law places particular emphasis on the contracting authority's interest in the physical assets related to the project and generally require the handover to the contracting authority of all of them, whereas in other countries privately financed infrastructure projects are regarded primarily as a means of procuring services over a specified period, rather than of constructing assets. Thus, the laws of the latter countries limit the concessionaire's handover

obligations to public assets and property originally made available to the concessionaire or certain other assets deemed to be necessary to ensure provision of the service. Sometimes, such property is transferred directly from the concessionaire to another concessionaire who succeeds it in the provision of the service.

27. Differences in legislative approaches often reflect the varying role of the public and private sectors under different legal and economic systems, but may also be the result of practical considerations on the part of the contracting authority. One practical reason for the contracting authority to allow the concessionaire to retain certain assets at the end of the project period may be the desire to lower the cost at which the service will be provided. If the project assets are likely to have a residual value for the concessionaire and that value can be taken into account during the selection process, the contracting authority may expect the tariffs charged for the service to be lower. Indeed, if the concessionaire does not expect to have to cover the entire cost of the assets in the life of the project, but can cover part of it by selling them, or using them for other purposes, after the project agreement expires, there is a possibility that the service may be provided at a lower cost than if the concessionaire had to cover all its costs in the life of the project. Moreover, certain assets may require such extensive refurbishing or technological upgrading at the end of the project period that it might not be cost-effective for the contracting authority to claim them. There may also be residual liabilities or consequential costs, for instance, because of liability for environmental damage or demolition costs.

28. For these reasons, the laws of some countries do not contemplate an unqualified transfer of all assets to the contracting authority, but allow a distinction between three main categories of assets:

(a) *Assets that must be transferred to the contracting authority.* This category typically includes public property that was used by the concessionaire to provide the service concerned. Assets may include both facilities made available to the concessionaire by the contracting authority and new facilities built by the concessionaire pursuant to the project agreement. Some laws also require the transfer of assets, goods and property subsequently acquired by the concessionaire for the purpose of operating the facility, in particular where they become part of, or are permanently affixed to, the infrastructure facility to be handed over to the contracting authority;

(b) *Assets that may be purchased by the contracting authority, at its option.* This category usually includes assets originally owned by the concessionaire, or subsequently acquired by it, which, without being indispensable or strictly necessary for the provision of the service, may enhance the convenience or efficiency of operating the facility or the quality of the service;

(c) *Assets that remain the private property of the concessionaire.* These are assets owned by the concessionaire that do not fall under (b) above. Typically the contracting authority is not entitled to such assets, which may be freely removed or disposed of by the concessionaire.

29. In the light of the above, it is useful to require in the law that the project agreement specify, as appropriate, which assets will be public property and which assets will be the private property of the concessionaire. The project agreement should identify which assets the concessionaire is required to transfer to the contracting authority or to a new concessionaire upon expiry or termination of the project agreement; which assets the contracting authority, at its option, may purchase from the concessionaire and which assets the concessionaire may freely remove or dispose of upon expiry or termination of the project agreement. These

provisions should be complemented by contractual criteria for establishing, as appropriate, the compensation to which the concessionaire may be entitled in respect of assets transferred to the contracting authority or to a new concessionaire or purchased by the contracting authority upon expiry or termination of the project agreement (see chap. V, "Duration, extension and termination of the project agreement", ___).

3. Easements

30. Special arrangements may be required, in cases where the concessionaire needs to transit on or through the property of third parties to access the project site or to perform or maintain any works required for the provision of the service (for example, to place traffic signs on adjacent lands; to install poles or electric transmission lines above third parties' property; to install and maintain transforming and switching equipment; to trim trees that interfere with telephonic lines placed on abutting property; or to lay oil, gas or water pipes).

31. The right to use another person's property for a specific purpose or to do work on it is often referred to by the word "easement". Easements usually require the consent of the owner of the property to which they pertain, unless such rights are provided by the law. Usually it is not an expeditious or cost-effective solution to leave it to the concessionaire to acquire easements directly from the owners of the properties concerned. Instead it is more frequent that those easements are compulsorily acquired by the contracting authority simultaneously with the project site.

32. A somewhat different alternative might be for the law itself to empower public service providers to enter, pass through or do work or fix installations upon the property of third parties, as required for the construction, operation and maintenance of public infrastructure. Such an approach, which may obviate the need to acquire easements in respect of individual properties, may be used in sector-specific legislation where it is deemed possible to determine, in advance, certain minimum easements that may be needed by the concessionaire. For instance, a law specific to the power generation sector may lay down the conditions under which the concessionaire obtains a right of cabling for the purpose of placing and operating basic and distribution networks on property belonging to third parties. Such a right may be needed for a number of measures, such as establishing or placing underground and overhead cables, as well as establishing supporting structures and transforming and switching equipment; maintaining, repairing and removing any of those installations; establishing a safety zone along underground or overhead cables; or removing obstacles along the wires or encroaching on the safety zone. Under some legal systems, the owners may be entitled to compensation should the extent of the rights granted to the concessionaire be such that the use of the properties by their owners is substantially hindered.

D. Financial arrangements

33. Financial arrangements typically include provisions concerning the concessionaire's obligations to raise funds for the project, outline the mechanisms for disbursing and accounting for funds, establish methods for calculating and adjusting the tariffs charged by the concessionaire and deal with the types of security interests that may be established in favour of the concessionaire's creditors. It is important to ensure that the laws of the host country facilitate or at least do not pose obstacles to the financial management of the project.

1. Financial obligations of the concessionaire

34. In privately financed infrastructure projects the concessionaire is typically responsible for raising the funds required to construct and operate the infrastructure facility. The concessionaire's obligations in this regard are typically set forth in detailed provisions in the project agreement. In most cases, the contracting authority or other public authorities would be interested in limiting their financial obligations to those specifically expressed in the project agreement or those forms of direct support that the Government has agreed to extend to the project.

35. The amount of private capital contributed directly by the project company's shareholders typically represents only a portion of the total proposed investment. A far greater portion derives from loans extended to the concessionaire by commercial banks and international financial institutions and from the proceeds of the placement of bonds and other negotiable instruments on the capital market (see "Introduction and background information on privately financed infrastructure projects", paras. 54-67). It is therefore important to ensure that the law does not unnecessarily restrict the concessionaire's ability to enter into the financial arrangements it sees fit for the purpose of financing the infrastructure.

2. Tariff setting and tariff control

36. Tariffs or usage fees charged by the concessionaire may be the main (sometimes even the sole) source of revenue to recover the investment made in the project in the absence of subsidies or payments by the contracting authority (see paras. 47-51) or the Government (see chap. II, "Project risks and government support," paras. 30-60). The concessionaire will therefore seek to be able to set and maintain tariffs and fees at a level that ensures sufficient cash flow for the project. However, in some legal systems there may be limits to the concessionaire's freedom to establish tariffs and fees. The cost at which public services are provided is typically an element of the Governments's infrastructure policy and a matter of immediate concern for large sections of the public. Thus, the regulatory framework in many countries includes special rules to control tariffs and fees for the provision of public services. Furthermore, statutory provisions or general rules of law in some legal systems establish parameters for pricing goods or services, for instance by requiring that tariffs meet certain standards of "reasonableness", "fairness" or "equity".

(a) The concessionaire's authority to collect tariffs

37. In a number of countries prior legislative authorization may be necessary in order for a concessionaire to collect tariffs for the provision of public services or to demand a fee for the use of public infrastructure facilities. The absence of such a general provision in legislation has in some countries given rise to judicial disputes challenging the concessionaire's authority to charge a tariff for the service.

38. Where it is deemed necessary to include in general legislation provisions concerning the level of tariffs and user fees, they should seek to achieve a balance between the interests of investors and current and future users. It is advisable that statutory criteria for determining tariffs and fees take into account, in addition to social factors the Government regards as relevant, the concessionaire's interest in achieving a level of cash flow that ensures the economic viability and commercial profitability of the project. Furthermore, it is advisable to provide the parties with the necessary authority to negotiate appropriate arrangements, including compensation provisions, in order to address situations where the application of tariff control rules directly or indirectly related to the provision of public services may result in fixing tariffs or fees below the level required for the profitable operation of the project (see para. 124).

(b) Tariff control methods

39. Domestic laws often subject tariffs or user fees to some control mechanism. Many countries have chosen to set only the broad tariff principles in legislation while leaving their actual implementation to the regulatory agency concerned and to the terms and conditions of licences or concessions. This approach is advisable because formulas are sector-specific and may require adaptation during the life of a project. Where tariff control measures are used, the law typically requires that the tariff formula be advertised with the request for proposals and be incorporated into the project agreement. Tariff control systems typically consist of formulas for the adjustment of tariffs and monitoring provisions to ensure compliance with the parameters for tariff adjustment. The most common tariff control methods used in domestic laws are based on rate-of-return and price-cap principles. There are also hybrid regimes that have elements of both. It should be noted that a well-functioning tariff control mechanism requires detailed commercial and economic analysis and that the brief discussion that follows offers only an overview of selected issues and possible solutions.

(i) Rate-of-return method

40. Under the rate-of-return method, the tariff adjustment mechanism is devised so as to allow the concessionaire an agreed rate of return on its investment. The tariffs for any given period are established on the basis of the concessionaire's overall revenue requirement to operate the facility, which involves determining its expenses, the investments undertaken to provide the services and the allowed rate of return. Reviews of the tariffs are undertaken periodically, sometimes whenever the contracting authority or other interested parties consider that the actual revenue is higher or lower than the revenue requirement of the facility. For that purpose, the contracting authority verifies the expenses of the facility, determines to what extent investments undertaken by the concessionaire are eligible for inclusion in the rate base and calculates the revenues that need to be generated to cover the allowable expenses and the return on investment agreed upon. The rate-of-return method is typically used in connection with the supply of public services for which a constant demand can be forecast, such as power, gas or water supply. For facilities or services exposed to greater elasticity of demand, such as tollroads, it might not be possible to keep the concessionaire's rate of return constant by regular tariff adjustments.

41. The rate-of-return method has been found to provide a high degree of security for infrastructure operators, since the concessionaire is assured that the tariffs charged will be sufficient to cover its operating expenses and allow the agreed rate of return. Because tariffs are adjusted regularly, thus keeping the concessionaire's rate of return essentially constant, investment in companies providing public services is exposed to little market risk. The result is typically lower costs of capital. The possible disadvantage of the rate-of-return method is that it provides little incentive for infrastructure operators to minimize their costs because of the assurance that those costs will be recovered through tariff adjustments. However, some level of incentive may exist if the tariffs are not adjusted instantaneously or if the adjustment does not apply retroactively. It should be noted that the implementation of the rate-of-return method requires a substantial amount of information, as well as extensive negotiations (for example, on eligible expenditures and cost allocation).

(ii) Price-cap method

42. Under the price-cap method, a tariff formula is set for a given period (such as four or five years) taking into account future inflation and future efficiency gains expected from the facility.

Tariffs are allowed to fluctuate within the limits set by the formula. In some countries, the formula is a weighted average of various indices, in others it is a consumer price index minus a productivity factor. Where substantial new investments are required, the formula may include an additional component to cover these extra costs. The formula can apply to all services of the company or to selected groups of services only, and different formulas may be used for different groups. The periodic readjustment of the formula is, however, based on the rate-of-return type of calculations, requiring the same type of detailed information as indicated above, though on a less frequent basis.

43. The implementation of the price-cap method may be less complex than the rate-of-return method. The price-cap method has been found to provide greater incentives for public service providers, since the concessionaire retains the benefits of lower than expected costs until the next adjustment period. At the same time, however, public service providers are typically exposed to more risk under the price-cap method than under the rate-of-return method. In particular, the concessionaire faces the risk of loss when the costs turn out to be higher than expected, since the concessionaire cannot raise the tariffs until the next tariff adjustment. The greater risk exposure increases the costs of capital. If the project company's returns are not allowed to rise, there might be difficulties in attracting new investment. Also, the company might be tempted to lower the quality of the service in order to reduce costs.

(iii) Hybrid methods

44. Many tariff adjustment methods currently being used combine elements of both the rate-of-return and the price-cap methods with a view to both reducing the risk borne by the service providers and providing sufficient incentives for efficiency in the operation of the infrastructure. One such hybrid method employs sliding scales for adjusting the tariffs that ensure upward adjustment when the rate of return falls below a certain threshold and downward adjustment when the rate of return exceeds a certain maximum, with no adjustment for rates of return falling between those levels. Other possible approaches to balancing the rate-of-return and price-cap methods include a review by the contracting authority of the investments made by the concessionaire to ensure that they meet the criteria of usefulness in order to be taken into account when calculating the concessionaire's revenue requirement. Another tariff adjustment technique that may be used to set tariffs, or more generally to monitor tariff levels, is benchmark or yardstick pricing. By comparing the various cost components of one public service provider with those of another and with international norms, the contracting authority may be able to judge whether tariff adjustments requested by the public service provider are reasonable.

(c) Policy considerations on tariff control

45. Each of the main tariff adjustment methods discussed above has its own advantages and disadvantages and varying impact on private sector investment decisions (see paras. 41 and 43). This should be taken into account by the legislature when considering the appropriateness of tariff control methods to domestic circumstances. Different methods may also be used for different infrastructure sectors. Some laws indeed authorize the contracting authority to apply either a price-cap or rate-of-return method in the selection of concessionaires, according to the scope and nature of investments and services. In choosing a tariff control method, it is important to take into account the impact of the various policy options on private sector investment decisions . Whatever mechanism is chosen, the capacity of the contracting authority or the regulatory agency to monitor adequately the performance of the concessionaire

and to implement the adjustment method satisfactorily should be carefully considered (see also chap. I, "General legislative and institutional framework", paras. 30-53).

46. It is important to bear in mind that tariff adjustment formulas cannot be set once and for all, as technology, exchange rates, wage levels, productivity and other factors are bound to change significantly, sometimes even unpredictably, over the concession period. Furthermore, tariff adjustment formulas are typically drawn up assuming a certain level of output or demand and may lead to unsatisfactory results if the volume of output or demand changes considerably. Therefore, many countries have established mechanisms for revision of tariff formulas, including periodic revisions (every four or five years, say) of the formula or ad hoc revisions whenever it is demonstrated that the formula has failed to ensure adequate compensation to the concessionaire (see also paras. 59-68). The tariff regime will also require adequate stability and predictability to enable public service providers and users to plan accordingly and to allow financing based on a predictable revenue. Investors and lenders may be particularly concerned about regulatory changes affecting the tariff adjustment method. Thus, they typically require the tariff adjustment formula to be incorporated into the project agreement.

3. Financial obligations of the contracting authority

47. Where the concessionaire offers services directly to the general public, the contracting authority or other public authority may undertake to make direct payments to the concessionaire as a substitute for, or in addition to, service charges to be paid by the users. Where the concessionaire produces a commodity for further transmission or distribution by another service provider, the contracting authority may undertake to purchase that commodity wholesale at an agreed price and on agreed conditions. The main examples of such arrangements are discussed briefly below.

(a) Direct payments

48. Direct payments by the contracting authority have been used in some countries as a substitute for, or as a supplement to, payments by the end users, in particular in tollroad projects, through a mechanism known as "shadow tolling". Shadow tolls are arrangements whereby the concessionaire assumes the obligation to develop, build, finance and operate a road or another transportation facility for a set number of years in exchange for periodic payments in place of, or in addition to, real or explicit tolls paid by users. Shadow toll schemes may be used to address risks that are specific to transportation projects, in particular the risk of lower-than-expected traffic levels (see chap. II, "Project risks and government support", para. 18). Furthermore, shadow toll schemes may be politically more acceptable than direct tolls, for example, where it is feared that the introduction of toll payments on public roads may give rise to protests by road users. However, where such arrangements involve some form of subsidy to the project company, their conformity with certain obligations of the host country under international agreements on regional economic integration or trade liberalization should be carefully considered.

49. Shadow tolls may involve a substantial expenditure for the contracting authority and require close and extensive monitoring by the contracting authority. In countries that have used shadow tolls for the development of new road projects, payments by the contracting authority to the concessionaire are based primarily on actual traffic levels, as measured in vehicle-miles. It is considered advisable to provide that payments are not made until traffic begins, so that the concessionaire has an incentive to open the road as quickly as possible. At the same time, it has been found useful to calculate payments on the basis of actual traffic for the duration of the concession. This system gives the concessionaire a reason to ensure that usage of the road

will be disrupted as little as possible by repair works. Alternatively, the project agreement could contain a penalty or liquidated damages clause for lack of lane availability resulting from repair works. The concessionaire is typically required to perform continuous traffic counts to calculate annual vehicle-miles, which are verified periodically by the contracting authority. A somewhat modified system may combine both shadow tolls and direct tolls paid by the users. In such a system, shadow tolls are only paid by the contracting authority in the event that the traffic level over a certain period falls below the agreed minimum level necessary for the concessionaire to operate the road profitably.

(b) Purchase commitments

50. In the case of independent power plants or other facilities that generate goods or services capable of being delivered on a long-term basis to an identified purchaser, the contracting authority or other public authority often assume an obligation to purchase such goods and services, at an agreed rate, as they are offered by the concessionaire. Contracts of this type are usually referred to as "off-take agreements". Off-take agreements often include two types of payments: payments for the availability of the production capacity and payments for units of actual consumption. In a power generation project, for example, the power purchase agreement may contemplate the following charges:

(a) *Capacity charges*. These are charges payable regardless of actual output in a billing period and are calculated to be sufficient to pay all of the concessionaire's fixed costs incurred to finance and maintain the project, including debt service and other ongoing financing expenses, fixed operation and maintenance expenses and a certain rate of return. The payment of capacity charges is often subject to the observance of certain performance or availability standards;

(b) *Consumption charges*. These charges are not intended to cover all of the concessionaire's fixed costs, but rather to pay the variable or marginal costs that the concessionaire has to bear to generate and deliver a given unit of the relevant service or good (such as a kilowatt-hour of electricity). Consumption charges are usually calculated to cover the concessionaire's variable operating costs, such as that of fuel consumed when the facility is operating, water treatment expenses and costs of consumables. Variable payments are often tied to the concessionaire's own variable operating costs or to an index that reasonably reflects changes in operating costs.

51. From the perspective of the concessionaire, a combined scheme of capacity and consumption charges is particularly useful to ensure cost recovery where the transmission or distribution function for the goods or services generated by the concessionaire is subject to a monopoly. However, the capacity charges provided in the off-take agreement should be commensurate with the other sources of generating capacity available to, or actually used by, the contracting authority. In order to ensure the availability of funds for payments by the contracting authority under the off-take agreement, it is advisable to consider whether advance budgeting arrangements are required. Payments under an off-take agreement may be backed by a guarantee issued by the host Government or by a national or international guarantee agency (see chap. II, "Project risks and government support", paras. 46 and 47).

E. Security interests

52. Generally, security interests in personal property provide the secured creditor with essentially two kinds of rights: a property right allowing the secured creditor, in principle, to

repossess the property or have a third party repossess and sell it, and a priority right to receive payment with the proceeds from the sale of the property in the event of default by the debtor. Security arrangements in project finance generally play a defensive or preventive role by ensuring that, in the event a third party acquires the debtor's operations (for example, by foreclosure, in bankruptcy or directly from the debtor) all of the proceeds resulting from the sale of those assets will go first to repayment of outstanding loans. Nevertheless, lenders would generally aim at obtaining security interests that allow them to foreclose and take possession of a project they can take over and operate either to restore its economical viability with a view to reselling at an appropriate time or to retaining the project indefinitely and collecting an ongoing revenue.

53. Security arrangements are crucial for financing infrastructure projects, in particular where the financing is structured under the "project finance" modality. The financing documents for privately financed infrastructure projects typically include both security over physical assets related to the project and security over intangible assets held by the concessionaire. A few of the main requirements for the successful closure of the security arrangements are discussed below. It should be noted, however, that, in some legal systems, any security given to lenders that makes it possible for them to take over the project is only allowed under exceptional circumstances and under certain specific conditions, namely, that the creation of such security requires the agreement of the contracting authority; that the security should be granted for the specific purpose of facilitating the financing or operation of the project; and that the security interests should not affect the obligations undertaken by the concessionaire. Those conditions often derive from general principles of law or from statutory provisions and cannot be waived by the contracting authority through contractual arrangements.

1. Security over physical assets

54. The negotiation of security arrangements required in order to obtain financing for the project may face legal obstacles where project assets are public property. If the concessionaire lacks title to the property it will in many legal systems have no (or only limited) power to encumber such property. Where limitations of this type exist, the law may still facilitate the negotiation of security arrangements for instance by indicating the types of asset in respect of which such security interests may be created or the type of security interest that is permissible. In some legal systems, a concessionaire that is granted a leasehold interest or right to use certain property may create a security interest over the leasehold interest or right to use.

55. Furthermore, security interests may also be created where the concession encompasses different types of public property, such as when title to adjacent land (and not only the right to use it) is granted to a railway company in addition to the right to use the public infrastructure. Where it is possible to create any form of security interests in respect of assets owned by, or required to be handed over to, the contracting authority or assets in relation to which the contracting authority has a contractual option of purchase (see para. 28), the law may require the approval of the contracting authority in order for the concessionaire to create such security interests.

2. Security over intangible assets

56. The main intangible asset in an infrastructure project is the concession itself, that is, the concessionaire's right to operate the infrastructure or to provide the relevant service. In most legal systems, the concession provides its holder with the authority to control the entire project and entitles the concessionaire to earn the revenue generated by the project. Thus, the value of the concession well exceeds the combined value of all of the physical assets involved in a

project. Because the concession holder would usually have the right to possess and dispose of all project assets (with the possible exception of those which are owned by other parties, such as public property in the possession of the concessionaire), the concession would typically encompass both present and future assets of a tangible or intangible nature. The lenders may therefore regard the concession as an essential component of the security arrangements negotiated with the concessionaire. A pledge of the concession itself may have various practical advantages for the concessionaire and the lenders, in particular in legal systems that would not otherwise allow the creation of security over all of a company's assets or which do not generally recognize non-possessory security interests (see chap. VII, "Other relevant areas of law", ___). These advantages may include avoiding the need to create separate security interests for each project asset, allowing the concessionaire to continue to deal with those assets in the ordinary course of business and making it possible to pledge certain assets without transferring actual possession of the assets to the creditors. Furthermore, a pledge of the concession may entitle the lenders, in case of default by the concessionaire, to avert termination of the project by taking over the concession and making arrangements for continuation of the project under another concessionaire. A pledge of the concession may, therefore, represent a useful complement to or, under certain circumstances, a substitute for a direct agreement between the lenders and the contracting authority concerning the lenders' step-in rights (see paras. 147-150).

57. However, in some legal systems there may be obstacles to a pledge of the concession in the absence of express legislative authorization. Under various legal systems, security interests may only be created in respect of assets that can be freely transferable by the grantor of the security. Since the right to operate the infrastructure is in most cases not transferable without the consent of the contracting authority (see paras. 62 and 63), in some legal systems it may not be possible for the concessionaire to create security interests over the concession itself. Recent legislation in some civil law jurisdictions has removed that obstacle by creating a special category of security interest, sometimes referred to by expressions such as *"hipoteca de concesion de obra pública"* or *"prenda de concesión de obra pública"* ("public works concession mortgage" or "pledge of public works concession"), which generally provides the lenders with an enforceable security interest covering all of the rights granted to the concessionaire under the project agreement. However, in order to protect the public interest, the law requires the consent of the contracting authority for any measure by the lenders to enforce such a right, under conditions to be provided in an agreement between the contracting authority and the lenders. A somewhat more limited solution has been achieved in some common law jurisdictions in which a distinction has been made between the non-transferable right to carry out a certain activity under a governmental licence (that is, the "public rights" arising under the licence) and the right to claim proceeds received by the licensee (the latter's "private rights" under the licence).

3. Securities over trade receivables

58. Another form of security typically given in connection with most privately financed infrastructure projects is an assignment to lenders of proceeds from contracts with customers of the concessionaire. Those proceeds may consist of the proceeds of a single contract (such as a power purchase commitment by a power distribution entity) or of a large number of individual transactions (such as monthly payment of gas or water bills). Those proceeds typically include the tariffs charged to the public for the use of the infrastructure (for example, tolls on a tollroad) or the price paid by the customers for the goods or services provided by the concessionaire (electricity charges, for example). They may also include the revenue of ancillary concessions. Security of this type is a typical element of the financing arrangements negotiated

with the lenders and the loan agreements often require that the proceeds of infrastructure projects be deposited in an escrow account managed by a trustee appointed by the lenders. Such a mechanism may also play an essential role in the issuance of bonds and other negotiable instruments by the concessionaire.

59. Security over trade receivables plays a central role in financing arrangements that involve the placement of bonds and other negotiable instruments. Those instruments may be issued by the concessionaire itself, in which case the investors purchasing the security will become its creditors, or they may be issued by a third party to whom the project receivables have been assigned through a mechanism known as "securitization". Securitization involves the creation of financial securities backed by the project's revenue stream, which is pledged to pay the principal and interest of that security. Securitization transactions usually involve the establishment of a legal entity separate from the concessionaire and especially dedicated to the business of securitizing assets or receivables. This legal entity is often referred to as a "special-purpose vehicle". The concessionaire assigns project receivables to the special-purpose vehicle, which, in turn, issues to investors interest-bearing instruments that are backed by the project receivables. The securitized bondholders thereby acquire the right to the proceeds of the concessionaire's transactions with its customers. The concessionaire collects the tariffs fromthe customers and transfers the funds to the special-purpose vehicle, which then transfers it to the securitized bondholders. In some countries, recent legislation has expressly recognized the concessionaire's authority to assign project receivables to a special-purpose vehicle, which holds and manages the receivables the benefit of the project's creditors. With a view to protecting the bondholders against the risk of insolvency of the concessionaire, it may be advisable to adopt the necessary legislative measures to enable the legal separation between the concessionaire and the special-purpose vehicle.

60. In most cases it would not be practical for the concessionaire to specify individually the receivables being assigned to the creditors. Assignment of receivables in project finance therefore typically takes the form of a bulk assignment of future receivables. Statutory provisions recognizing the concessionaire's authority to pledge the proceeds of infrastructure projects have been included in recent domestic legislation in various legal systems. However, there may be considerable uncertainty in various legal systems with regard to the validity of the wholesale assignment of receivables and of future receivables. It is therefore important to ensure that domestic laws on security interests do not hinder the ability of the parties effectively to assign trade receivables in order to obtain financing for the project (see chap. VII, "Other relevant areas of law", ___).

4. Security over shares of the project company

61. Where the concession may not be assigned or transferred without the consent of the contracting authority (see paras.___), the law sometimes prohibits the establishment of security over the shares of the project company. It should be noted, however, that security over the shares of the project company is commonly required by lenders in project finance transactions and that general prohibitions on the establishment of such security may limit the project company's ability to raise funding for the project. As with other forms of security, it may therefore be useful for the law to authorize the concessionaire's shareholders to create such security, subject to the contracting authority's prior approval, where an approval would be required for the transfer of equity participation in the project company (see paras. 64-68).

F. Assignment of the concession

62. Concessions are granted in view of the particular qualifications and reliability of the concessionaire and in most legal systems they are not freely transferable. Indeed, domestic laws often prohibit the assignment of the concession without the consent of the contracting authority. The purpose of these restrictions is typically to ensure the contracting authority's control over the qualifications of infrastructure operators or public service providers.

63. Some countries have found it useful to mention in the legislation the conditions under which approval for the transfer of a concession prior to its expiry may be granted, such as, for example, acceptance by the new concessionaire of all obligations under the project agreement and evidence of the new concessionaire's technical and financial capability to provide the service. General legislative provisions of this type may be supplemented by specific provisions in the project agreement setting forth the scope of those restrictions, as well as the conditions under which the consent of the contracting authority may be granted. However, it should be noted that restrictions typically apply to the voluntary transfer of its rights by the concessionaire; they do not preclude the compulsory transfer of the concession to an entity appointed by the lenders, with the consent of the contracting authority, for the purpose of averting termination due to serious default by the concessionaire (see also paras. 147-150).

G. Transfer of controlling interest in the project company

64. The contracting authority may be concerned that the original members of the bidding consortium maintain their commitment to the project throughout its duration and that effective control over the project company will not be transferred to entities unknown to the contracting authority. Concessionaires are selected to carry out infrastructure projects at least partly on the basis of their experience and capabilities for that sort of project (see chap. III, "Selection of the concessionaire", paras. 38-40). Contracting authorities are therefore concerned that, if the concessionaire's shareholders are entirely free to transfer their investment in a given project, there will be no assurance as to who will actually be delivering the relevant services.

65. Contracting authorities may draw reassurance from the experience that the selected bidding consortium demonstrated in the pre-selection phase and from the performance guarantees provided by the parent organizations of the original consortium and its subcontractors. In practice, however, the reassurance that may result from the apparent expertise of the shareholders in the concessionaire should not be overemphasized. Where a separate legal entity is established to carry out the project, which is often the case (see para. 12), the backing of the concessionaire's shareholders, should the project run into difficulties, may be limited to their maximum liability. Thus, restrictions on the transferability of investment, in and of themselves, may not represent sufficient protection against the risk of performance failure by the concessionaire. In particular, these restrictions are not a substitute for appropriate contractual remedies under the project agreement, such as monitoring of the level of service provided (see paras. 147-150) or termination without full compensation in case of unsatisfactory performance (see chap. V, "Duration, extension and termination of the project agreement", ___).

66. In addition to the above, restrictions on the transferability of shares in companies providing public services may also present some disadvantages for the contracting authority. As noted earlier (see "Introduction and background information on privately financed infrastructure projects", paras. 54-67), there are numerous types of funding available from different investors for different risk and reward profiles. The initial investors, such as construction companies and equipment suppliers, will seek to be rewarded for the higher risks

they take on, while subsequent investors may require a lesser return commensurate with the reduced risks they bear. Most of the initial investors have finite resources and need to recycle capital in order to be able to participate in new projects. Therefore, those investors might not be willing to tie up capital in long-term projects. At the end of the construction period, the initial investors might prefer to sell their interest on to a secondary equity provider whose required rate of return is less. Once usage is more certain, another refinancing could take place. However, if the investors' ability to invest and re-invest capital for project development is restricted by constraints on the transferability of shares in infrastructure projects, there is a risk of a higher cost of funding. In some circumstances it may not be possible to fund a project at all, as some investors whose involvement may be crucial for the implementation of the project may not be willing to participate. From a long-term perspective, the development of a market place for investment in public infrastructure may be hindered if investors are unnecessarily constrained in the freedom to transfer their interest in privately financed infrastructure projects.

67. For the above reasons, it may be advisable to limit the restrictions on the transfer of a controlling interest in the project company to a certain period of time (for example, a certain number of years after the entry into force of the project agreement) or to situations where such restrictions are justified by reasons of public interest. One such situation may be where the concessionaire is in possession of public property or where the concessionaire receives loans, subsidies, equity or other forms of direct governmental support. In these cases, the contracting authority's accountability for the proper use of public funds requires assurances that the funds and assets are entrusted to a solid company, to which the original investors remain committed during a reasonable period. Another situation that may justify imposing limitations on the transfer of shares of concessionaire companies may be where the contracting authority has an interest in preventing transfer of shares to particular investors. For example, the contracting authority may wish to control acquisition of controlling shares of public service providers to avoid the formation of oligopolies or monopolies in liberalized sectors. Or it may not be thought appropriate for a company that had defrauded one part of Government to be employed by another through a newly acquired subsidiary.

68. In these exceptional cases it may be advisable to require that the initial investors seek the prior consent of the contracting authority before transferring their equity participation. It should be made clear in the project agreement that any such consent should not be unreasonably withheld or unduly delayed. For transparency purposes, it may also be advisable to establish the grounds for withholding approval and to require the contracting authority to specify in each instance the reasons for any refusal. The appropriate duration of such limitations—whether for a particular phase of the project or for the entire concession term—may need to be considered on a case-by-case basis. In some projects, it may be possible to relax such restrictions after the facility has been completed. It is also advisable to clarify in the project agreement whether these limitations, if any, should apply to the transfer of any participation in the concessionaire, or whether the concerns of the contracting authority will focus on one particular investor (such as, a construction company or the facility designer) while the construction phase lasts or for a significant time beyond.

H. Construction works

69. Contracting authorities purchasing construction works typically act as the employer under a construction contract and retain extensive monitoring and inspection rights, including the right to review the construction project and request modifications to it, to follow closely the

construction work and schedule, to inspect and formally accept the completed work and to give final authorization for the operation of the facility.

70. On the other hand, in many privately financed infrastructure projects, the contracting authority may prefer to transfer such responsibility to the concessionaire. Instead of assuming direct responsibility for managing the details of the project, the contracting authorities may prefer to transfer that responsibility to the concessionaire by requiring the latter to assume full responsibility for the timely completion of the construction. The concessionaire, too, will be interested in ensuring that the project is completed on time and that the cost estimate is not exceeded, and will typically negotiate fixed-price, fixed-time turnkey contracts that include guarantees of performance by the construction contractors. Therefore, in privately financed infrastructure projects it is the concessionaire that for most purposes performs the role that the employer would normally play under a construction contract.

71. For these reasons, legislative provisions on the construction of privately financed infrastructure facilities are in some countries limited to a general definition of the concessionaire's obligation to perform the public works in accordance with the provisions of the project agreement and give the contracting authority the general right to monitor the progress of the work with a view to ensuring that it conforms to the provisions of the agreement. In those countries, more detailed provisions are then left to the project agreement.

1. Review and approval of construction plans

72. Where it is felt necessary to deal with construction works and related matters in legislation, it is advisable to devise procedures that help to keep completion time and construction costs within estimates and lower the potential for disputes between the concessionaire and the public authorities involved. For instance, where statutory provisions require that the contracting authority review and approve the construction project, the project agreement should establish a deadline for the review of the construction project and provide that the approval shall be deemed to be granted if no objections are made by the contracting authority within the relevant period. It may also be useful to set out in the project agreement the grounds on which the contracting authority may raise objections to or request modifications in the project, such as safety, defence, security, environmental concerns or non-conformity with the specifications.

2. Variation in the project terms

73. During the course of construction of an infrastructure facility, it is common for situations to arise that make it necessary or advisable to alter certain aspects of the construction. The contracting authority may therefore wish to retain the right to order changes in respect of such aspects as the scope of construction, the technical characteristics of equipment or materials to be incorporated in the work or the construction services required under the specifications. Such changes are referred to in this *Guide* as "variations". As used in the *Guide*, the word "variation" does not include tariff adjustments or revisions made as a result of cost changes or currency fluctuations (see paras. 39-44). Likewise, renegotiation of the project agreement in cases of substantial change in conditions (see paras. 126-130) is not regarded in the *Guide* as a variation.

74. Given the complexity of most infrastructure projects, it is not possible to exclude the need for variations in the construction specifications or other requirements of the project. However, such variations often cause delay in the execution of the project or in the delivery of the public service; they may also render the performance under the project agreement more onerous for

the concessionaire. Furthermore, the cost of implementing extensive variation orders may exceed the concessionaire's own financial means, thus requiring substantial additional funding that may not be obtainable at an acceptable cost. It is therefore advisable for the contracting authority to consider measures to control the possible need for variations. The quality of the feasibility studies required by the contracting authority and of the specifications provided during the selection process (see chap. III, "Selection of the concessionaire", paras. 61 and 64-66) play an important role in avoiding subsequent changes in the project.

75. The project agreement should set forth the specific circumstances under which the contracting authority may order variations in respect of construction specifications and the compensation that may be due to the concessionaire, as appropriate, to cover the additional cost and delay entailed by implementing the variations. The project agreement should also clarify the extent to which the concessionaire is obliged to implement those variations and whether the concessionaire may object to variations and, if so, on which grounds. According to the contractual practice of some legal systems, the concessionaire may be released of its obligations when the amount of additional costs entailed by the modification exceeds a set maximum limit.

76. Various contractual approaches for dealing with variations have been used in large construction contracts to deal with the extent of the contractor's obligation to implement changes and the required adjustments in the contract price or contract duration. Such solutions may also be used, *mutatis mutandis*, to deal with variations sought by the contracting authority under the project agreement.[1] It should be noted, however, that in infrastructure concessions the project company's payment consists of user fees or prices for the output of the facility, rather than a global price for the construction work. Thus, compensation methods used in connection with infrastructure concessions sometimes include a combination of various methods, ranging from lump-sumpayments to tariff increases, or extensions of the concession period. For instance, there may be changes that result in an increase in the cost that the concessionaire may be able to absorb and finance itself and amortize by means of an adjustment in the tariff or payment mechanism, as appropriate. If the concessionaire cannot refinance or fund the changes itself, the parties may wish to consider lump-sum payments as an alternative to an expensive and complicated refinancing structure.

3. Monitoring powers of the contracting authority

77. In some legal systems, public authorities purchasing construction works customarily retain the power to order the suspension or interruption of the works for reasons of public interest. However, with a view to providing some reassurance to potential investors, it may be useful to limit the possibility of such interference and to provide that no such interruption should be of a duration or extent greater than is necessary, taking into consideration circumstances that gave rise to the requirement to suspend or interrupt the work. It may also be useful to agree on a maximum period of suspension and to provide for appropriate compensation to the concessionaire. Furthermore, guarantees may be provided to ensure payment of compensation or to indemnify the concessionaire for loss resulting from suspension of the project (see also chap. II, "Project risks and government support", paras. 48-50).

78. In some legal systems, facilities built for use in connection with the provision of certain public services become public property once construction is finished (see para. 24). In such cases, the law often requires that the completed facility be formally accepted by the contracting authority or another public authority. Such formal acceptance is typically given only after inspection of the completed facility and satisfactory conclusion of the necessary tests to ascertain that the facility is operational and meets the specifications and technical and safety

requirements. Even where formal acceptance by the contracting authority is not required (for example, where the facility remains the property of the concessionaire), provisions concerning final inspection and approval of the construction work by the contracting authority are often required in order to ensure compliance with health, safety, building or labour regulations. The project agreement should set out in detail the nature of the completion tests or the inspection of the completed facility; the timetable for the tests (for instance, it may be appropriate to undertake partial tests over a period, rather than a single test at the end); the consequences of failure to pass a test; and the responsibility for organizing the resources for the test and covering the corresponding costs. In some countries, it has been found useful to authorize the facility to operate on a provisional basis, pending final approval by the contracting authority, and to provide an opportunity for the concessionaire to rectify defects that might be found at that juncture.

4. Guarantee period

79. The construction contracts negotiated by the concessionaire will typically provide for a quality guarantee under which the contractors assume liability for defects in the works and for inaccuracies or insufficiencies in technical documents supplied with the works, except for reasonable exclusions (such as normal wear and tear or faulty maintenance or operation by the concessionaire). Additional liability may also derive from statutory provisions or general principles of law under the applicable law, such as a special extended liability period for structural defects in works, which is provided in some legal systems. The project agreement should provide that final approval or acceptance of the facility by the contracting authority will not release the construction contractors from any liability for defects in the works and for inaccuracies or insufficiencies in technical documents that may be provided under the construction contracts and the applicable law.

I. Operation of infrastructure

80. Conditions for the operation and maintenance of the facility, as well as for quality and safety standards, are often enumerated in the law and spelled out in detail in the project agreement. In addition, especially in the fields of electricity, water and sanitation and public transportation, the contracting authority or an independent regulatory agency may exercise an oversight function over the operation of the facility. An exhaustive discussion of legal issues relating to the conditions of operation of infrastructure facilities would exceed the scope of this *Guide*. The following paragraphs therefore contain only a brief presentation of some of the main issues.

81. Regulatory provisions on infrastructure operation and legal requirements for the provision of public services are intended to achieve various objectives of public relevance. Given the usually long duration of infrastructure projects, there is a possibility that such provisions and requirements may need to be changed during the life of the project agreement. It is important, however, to bear in mind the private sector's need for a stable and predictable regulatory framework. Changes in regulations or the frequent introduction of new and stricter rules may have a disruptive impact on the implementation of the project and compromise its financial viability. Therefore, while contractual arrangements may be agreed to by the parties to counter the adverse effects of subsequent regulatory changes (see paras. 122-125), regulatory agencies would be well advised to avoid excessive regulation or unreasonably frequent changes in existing rules.

1. Performance standards

82. Public service providers generally have to meet a set of technical and service standards. Such standards are in most cases too detailed to figure in legislation and may be included in implementing decrees, regulations or other instruments. Service standards are often spelled out in great detail in the project agreement. They include quality standards, such as requirements with respect to water purity and pressure; ceilings on the length of time to perform repairs; ceilings on the number of defects or complaints; timely performance of transport services; continuity in supply; and health, safety and environmental standards. Legislation may, however, impose the basic principles that will guide the establishment of detailed standards or require compliance with international standards.

83. The contracting authority typically retains the power to monitor the adherence of the project company to the regulatory performance standards. The concessionaire will be interested in avoiding as much as possible any interruption in the operation of the facility and in protecting itself against the consequences of any such interruption. It will seek assurances that the exercise by the contracting authority of its monitoring or regulatory powers does not cause undue disturbance or interruption in the operation of the facility and that it does not result in undue additional costs to the concessionaire.

2. Extension of services

84. In some legal systems, an entity operating under a governmental concession to provide certain essential services such as electricity or potable water to a community or territory and its inhabitants is held to assume an obligation to provide a service system that is reasonably adequate to meet the demand of the community or territory. That obligation often relates not only to the historic demand at the time the concession was awarded, but implies an obligation to keep pace with the growth of the community or territory served and gradually to extend the system as may be required by the reasonable demand of the community or territory. In some legal systems, the obligation has the nature of a public duty that may be invoked by any resident of the relevant community or territory. In other legal systems, it has the nature of a statutory or contractual obligation that may be enforced by the contracting authority or by a regulatory agency, as the case may be.

85. In some legal systems, this obligation is not absolute and unqualified. The concessionaire's duty to extend its service facilities may indeed depend upon various factors, such as the need and cost of the extension and the revenue that may be expected as a result of the extension; the concessionaire's financial situation; the public interest in effecting such an extension; and the scope of the obligations assumed by the concessionaire in that regard under the project agreement. In some legal systems, the concessionaire may be under an obligation to extend its service facilities even if the particular extension is not immediately profitable or even if, as a result of the extensions being carried out, the concessionaire's territory might eventually include unprofitable areas. That obligation is nevertheless subject to some limits, since the concessionaire is not required to carry out extensions that place an unreasonable burden on it or its customers. Depending on the particular circumstances, the cost of carrying out extensions of service facilities may be absorbed by the concessionaire, passed on to the customers or end users in the form of tariff increases or extraordinary charges or absorbed in whole or in part by the contracting authority or other public authority by means of subsidies or grants. Given the variety of factors that may need to be taken into account in order to assess the reasonableness of any particular extension, the project agreement should define the circumstances under which the concessionaire may be required to carry out extensions in its service facilities and the appropriate methods for financing the cost of any such extension.

3. Continuity of service

86. Another obligation of public service providers is to ensure the continuous provision of the service under most circumstances, except for narrowly defined exempting events (see also paras. 132-134). In some legal systems, that obligation has the nature of a statutory duty that applies even if it is not expressly stated in the project agreement. The corollary of that rule, in legal systems where it exists, is that various circumstances that under general principles of contract law might authorize a contract party to suspend or discontinue the performance of its obligations, such as economic hardship or breach by the other party, cannot be invoked by the concessionaire as grounds for suspending or discontinuing, in whole or in part, the provision of a public service. In some legal systems, the contracting authority may even have special enforcement powers to compel the concessionaire to resume providing service in the event of unlawful discontinuance.

87. That obligation, too, is subject to a general rule of reasonableness. Various legal systems recognize the concessionaire's right to fair compensation for having to deliver the service under situations of hardship (see paras. 126-130). Moreover, in some legal systems, it is held that a public service provider may not be required to operate where its overall operation results in a loss. Where the public service as a whole, and not only one or more of its branches or territories, ceases being profitable, the concessionaire may have the right to direct compensation by the contracting authority or, alternatively, the right to terminate the project agreement. However, termination typically requires the consent of the contracting authority or a judicial decision. In legal systems that allow such a solution, it is advisable to clarify in the project agreement which extraordinary circumstances would justify the suspension of the service or even release the concessionaire from its obligations under the project agreement (see also chap. V, "Duration, extension and termination of the project agreement", ___).

4. Equal treatment of customers or users

88. Entities that provide certain services to the general public are, in some jurisdictions, under a specific obligation to ensure the availability of the service under essentially the same conditions to all users and customers falling within the same category. However, differentiation based on a reasonable and objective classification of customers and users is accepted in those legal systems as long as like contemporaneous service is rendered to consumers and users engaged in like operations under like circumstances. It may thus not be inconsistent with the principle of equal treatment to charge different prices or to offer different access conditions to different categories of users (for example, domestic consumers, on the one hand, and business or industrial consumers, on the other), provided that the differentiation is based on objective criteria and corresponds to actual differences in the situation of the consumers or the conditions under which the service is provided to them. Nevertheless, where a difference in charges or other conditions of service is based on actual differences in service (such as higher charges for services provided at hours of peak consumption), it typically has to be commensurate with the amount of difference.

89. In addition to differentiation established by the concessionaire itself, different treatment of certain users or customers may be the result of legislative action. In many countries, the law requires that specific services must be provided at particularly favourable terms to certain categories of users and customers, such as discounted transport for schoolchildren or senior citizens, or reduced water or electricity rates for lower-income or rural users. Public service

providers may recoup these service burdens or costs in several ways, including through government subsidies, through funds or other official mechanisms created to share the financial burden of these obligations among all public service providers or through internal cross-subsidies from more profitable services (see chap. II, "Project risks and government support", paras. 42-44).

5. Interconnection and access to infrastructure networks

90. Companies operating infrastructure networks in sectors such as railway transport, telecommunications or power or gas supply are sometimes required to allow other companies to have access to the network. That requirement may be stated in the project agreement or in sector-specific laws or regulations. Interconnection and access requirements have been introduced in certain infrastructure sectors as a complement to reforms in the structure of a given sector; in others, they have been adopted to foster competition in sectors that remained fully or partially integrated (for a brief discussion of market structure issues, see "Introduction and background information", paras. 21-46).

91. Network operators are often required to provide access on terms that are fair and non-discriminatory from a financial as well as a technical point of view. Non-discrimination implies that the new entrant or service provider should be able to use the infrastructure of the network operator on conditions that are not less favourable than those granted by the network operator to its own services or to those of competing providers. It should be noted, however, that many pipeline access regimes, for example, do not require completely equal terms for the carrier and rival users. The access obligation may be qualified in some way. It may, for instance, be limited to spare capacity only or be subject to reasonable, rather than equal, terms and conditions.

92. While access pricing is usually cost-based, regulatory agencies often retain the right to monitor access tariffs to ensure that they are high enough to give adequate incentive to invest in the required infrastructure and low enough to allow new entrants to compete on fair terms. Where the network operator provides services in competition with other providers, there may be requirements that its activities be separated from an accounting point of view in order to determine the actual cost of the use by third parties of the network or parts of it.

93. Technical access conditions may be equally important and network operators may be required to adapt their network to satisfy the access requirements of new entrants. Access may be to the network as a whole or to monopolistic parts or segments of the network (sometimes also referred to as bottleneck or essential facilities). Many Governments allow service providers to build their own infrastructure or to use alternative infrastructure where available. In such cases, the service provider may only need access to a small part of the network and cannot, under many regulations, be forced to pay more than the cost corresponding to the use of the specific facility it needs, such as the local telecommunications loop, transmission capacity for the supply of electricity or the use of a track section of railway.

6. Disclosure requirements

94. Many domestic laws impose on public service providers an obligation to provide to the regulatory agency accurate and timely information on their operations and to grant it specific enforcement rights. The latter may encompass inquiries and audits, including detailed performance and compliance audits, sanctions for non-cooperative companies and injunctions or penalty procedures to enforce disclosure.

95. Public service providers are normally required to maintain and disclose to the regulatory agency their financial accounts and statements and to maintain detailed cost accounting

allowing the regulatory agency to track various aspects of the company's activities separately. Financial transactions between the concessionaire company and affiliated companies may also require scrutiny, as concessionaire companies may try to transfer profits to non-regulated businesses or foreign affiliates. Infrastructure operators may also have detailed technical and performance reporting requirements. As a general rule, however, it is important to define reasonable limits to the extent and type of information that infrastructure operators are required to submit. Furthermore, appropriate measures should be taken to protect the confidentiality of any proprietary information that the concessionaire and its affiliated companies may submit to the regulatory agency.

7. Enforcement powers of the concessionaire

96. In countries with a well-established tradition of awarding concessions for the provision of public services, the concessionaire may have the power to establish rules designed to facilitate the provision of the service (such as instructions to users or safety rules), take reasonable measures to ensure compliance with those rules and suspend the provision of service for emergency or safety reasons. For that purpose, general legislative authority, or even case-by-case authorization from the legislature, may be required in most legal systems. The extent of powers given to the concessionaire is usually defined in the project agreement, however, and may not need to be provided in detail in legislation. It may be advisable to provide that the rules issued by the concessionaire become effective upon approval by the regulatory agency or the contracting authority, as appropriate. However, the right to approve operating rules proposed by the concessionaire should not be arbitrary and the concessionaire should have the right to appeal a decision to refuse approval of the proposed rules (see also chap. I, "General legislative and institutional framework", paras. 49 and 50).

97. Of particular importance for the concessionaire is the question whether the provision of the service may be discontinued because of default or non-compliance by its users. Despite the concessionaire's general obligation to ensure the continuous provision of the service (see paras. 86 and 87), many legal systems recognize that entities providing public services may establish and enforce rules that provide for shutting off of the service for a consumer or user who has defaulted in payment for it or who has seriously infringed the conditions for using it. The power to do so is often regarded as crucial in order to prevent abuse and ensure the economic viability of the service. However, given the essential nature of certain public services, that power may require legislative authority in some legal systems. Furthermore, there may be a number of expressed or implied limitations upon or conditions for the exercise of that power, such as special notice requirements and specific consumer remedies. Additional limitations and conditions may derive from the application of general consumer protection rules (see chap. VII, "Other relevant areas of law", ___).

J. General contractual arrangements

98. This section discusses selected contractual arrangements that typically appear in project agreements in various sectors and are often reflected in standard contract clauses used by domestic contracting authorities. Although essentially contractual in nature, the arrangements discussed in this section may have some important implications for the legislation of the host country, according to its particular legal system.

1. Subcontracting

99. Given the complexity of infrastructure projects, the concessionaire typically retains the services of one or more construction contractors to perform some or the bulk of the construction work under the project agreement. The concessionaire may also wish to retain the services of contractors with experience in the operation and maintenance of infrastructure during the operational phase of the project. The laws of some countries generally acknowledge the concessionaire's right to enter into contracts as needed for the execution of the construction work. A legislative provision recognizing the concessionaire's authority to subcontract may be particularly useful in countries where there are limitations to the ability of government contractors to subcontract.

(a) Choice of subcontractors

100. The concessionaire's freedom to hire subcontractors is in some countries restricted by rules that prescribe the use of tendering and similar procedures for the award of subcontracts by public service providers. Such statutory rules have often been adopted when infrastructure facilities were primarily or exclusively operated by the Government, with little or only marginal private sector investment. The purpose of such statutory rules is to ensure economy, efficiency, integrity and transparency in the use of public funds. However, in the case of privately financed infrastructure projects, such provisions may discourage the participation of potential investors, since the project sponsors typically include engineering and construction companies that participate in the project in the expectation that they will be given the main contracts for the execution of the construction and other work.

101. The concessionaire's freedom to select its subcontractors is not unlimited, however. In some countries, the concessionaire has to identify in its proposal which contractors will be retained, including information on their technical capability and financial standing. Other countries either require that such information be provided at the time the project agreement is concluded or subject such contracts to prior review and approval by the contracting authority. The purpose of such provisions is to avoid possible conflicts of interest between the project company and its shareholders, a point that would normally also be of interest to the lenders, who may wish to ensure that the project company's contractors are not overpaid. In any event, if it is deemed necessary for the contracting authority to have the right to review and approve the project company's subcontracts, the project agreement should clearly define the purpose of such review and approval procedures and the circumstances under which the contracting authority's approval may be withheld. As a general rule, approval should not normally be withheld unless the subcontracts are found to contain provisions manifestly contrary to the public interest (for example, provisions for excessive payments to subcontractors or unreasonable limitations of liability) or contrary to mandatory rules having the nature of public law that apply to the execution of privately financed infrastructure projects in the host country.

(b) Governing law

102. It is common for the concessionaire and its contractors to choose a law that is familiar to them and that in their view adequately governs the issues addressed in their contracts. Depending upon the type of contract, different issues concerning the governing law clause will arise. For example, equipment supply and other contracts may be entered into with foreign companies and the parties may wish to choose a law known to them as providing, for example, an adequate warranty regime for equipment failure or non-conformity of equipment. In turn, the concessionaire may agree to the application of the laws of the host country in connection with contracts entered into with local customers.

103. Domestic laws specific to privately financed infrastructure projects seldom contain provisions concerning the law governing the contracts entered into by the concessionaire. In fact, most countries have found no compelling reason for making specific provisions concerning the law governing the contracts between the concessionaire and its contractors and have preferred to leave the question to a choice-of-law clause in their contracts or to the applicable rules of private international law. It should be noted, however, that the freedom to choose the applicable law for contracts and other legal relationships is in some legal systems subject to conditions and restrictions pursuant to rules of private international law or certain rules of public law of the host country. For instance, States parties to some regional economic integration agreements are obliged to enact harmonized provisions of private international law dealing, *inter alia*, with contracts between public service providers and their contractors. While rules of private international law often allow considerable freedom to choose the law governing commercial contracts, that freedom is in some countries restricted for contracts and legal relationships that are not qualified as commercial, such as, for instance, certain contracts entered into by public authorities of the host country (for example, guarantees and assurances by the Government, power purchase or fuel supply commitments by a public authority) or contracts with consumers.

104. In some cases, provisions have been included in domestic legislation for the purpose of clarifying, as appropriate, that the contracts entered into between the concessionaire and its contractors are governed by private law and that the contractors are not agents of the contracting authority. A provision of that type may in some countries have a number of practical consequences, such as no subsidiary liability of the contracting authority for the acts of the subcontractors or no obligation on the part of the responsible public entity to pay worker's compensation for work-related illness, injury or death to the subcontractors' employees.

2. Liability with respect to users and third parties

105. Defective construction or operation of an infrastructure facility may result in the death of or personal injury to employees of the concessionaire, users of the facility or other third parties or in damage to their property. The issues concerning damages to be paid to third parties in such cases are complex and may be governed not by rules of the law applicable to the project agreement governing contractual liability, but rather by applicable legal rules governing extra-contractual liability, which are often mandatory. Also, in some legal systems, there are special mandatory rules governing the extra-contractual liability of public authorities to which the contracting authority may be subject. Moreover, the project agreement cannot limit the liability of the concessionaire or the contracting authority to compensate third parties who are not parties to the project agreement. It is therefore advisable for the contracting authority and the concessionaire to provide for the internal allocation of risks between them as regards damages to be paid to third parties due to death, personal injury or damage to their property, to the extent that this allocation is not governed by mandatory rules. It is also advisable for the parties to provide for insurance against such risks (see paras. 119 and 120).

106. If a third party suffers personal injury or damage to its property as a result of the construction or operation of the facility and brings a claim against the contracting authority, the law may provide that the concessionaire alone should bear any responsibility in that regard and that contracting authority should not bear any liability as regards such third party claims, except where the damage was caused by the serious default or recklessness of the contracting authority. It may be useful to provide, in particular, that the mere approval of the design or specification of the facility by the contracting authority or its acceptance of the construction works or final authorization for the operation of the facility or its use by the public does not

entail the assumption by the contracting authority of any liability for damage sustained by users of the facility or other third parties arising out of the construction or operation of the facility or the inadequacy of the approved design or specifications. Moreover, since provisions on the allocation of liability may not be enforceable against third parties under the applicable law, it may be advisable for the project agreement to provide that the contracting authority should be protected and indemnified in respect of compensation claims brought by third parties who sustain injury or damage to their property resulting fromthe construction or operation of the infrastructure facility.

107. The project agreement should also provide that the parties should inform each other of any claim or proceedings or anticipated claims or proceedings against them in respect of which the contracting authority is entitled to be indemnified and give reasonable assistance to one another in the defence of such claims or proceedings to the extent permitted by the law of the country where such proceedings are instituted.

3. Performance guarantees and insurance

108. The obligations of the concessionaire are usually complemented by the provision of some form of guarantee of performance in the event of default and insurance coverage against a number of risks. The law in some countries generally requires that adequate guarantees of performance be provided by the concessionaire and refer the matter to the project agreement for further details. In other countries, the law contains more detailed provisions, for instance requiring the offer of a certain type of guarantee up to a stated percentage of the basic investment.

(a) Types, functions and nature of performance guarantees

109. Performance guarantees are generally of two types. Under one type, the monetary performance guarantee, the guarantor undertakes only to pay the contracting authority funds up to a stated limit to satisfy the liabilities of the concessionaire in the event of the latter's failure to perform. Monetary performance guarantees may take the form of a contract bond, a stand-by letter of credit or an on-demand guarantee. Under the other type of guarantee, the performance bond, the guarantor chooses one of two options: (a) to rectify defective or finish incomplete construction itself; or (b) to obtain another contractor to rectify defective or finish incomplete construction and compensate the contracting authority for losses caused by the failure to perform. The value of such an undertaking is limited to a stated amount or a certain percentage of the contract value. Under a performance bond, the guarantor also frequently reserves the option to discharge its obligations solely by the payment of money to the contracting authority. Performance bonds are generally furnished by specialized guarantee institutions, such as bonding and insurance companies. A special type of performance bond is the maintenance bond, which protects the contracting authority against future failures that could arise during the start-up ormaintenance period and serve as guarantee that any repair or maintenance work during the post-completion warranty period will be duly carried out by the concessionaire.

110. As regards their nature, performance guarantees may be generally divided into independent guarantees and accessory guarantees. A guarantee is said to be "independent" if the guarantor's obligation is independent from the concessionaire's obligations under the project agreement. Under an independent guarantee (often called a first-demand guarantee) or a stand-by letter of credit, the guarantor or issuer is obligated to make payment on demand by the beneficiary and the latter is entitled to recover under the instrument if it presents the document or documents stipulated in the terms of the guarantee or stand-by letter of credit.

Such a document might be simply a statement by the beneficiary that the contractor has failed to perform. The guarantor or issuer is not entitled to withhold payment on the ground that there has in fact been no failure to perform under the main contract; however, under the law applicable to the instrument, payment may in very exceptional and narrowly defined circumstances be refused or restrained (for example, when the claim by the beneficiary is manifestly fraudulent). In contrast, a guarantee is accessory when the obligation of the guarantor involves more than the mere examination of a documentary demand for payment in that the guarantor may have to evaluate evidence of liability of the contractor for failure to perform under the works contract. The nature of the link may vary under different guarantees and may include the need to prove the contractor's liability in arbitral proceedings. By their nature, performance bonds have an accessory character to the underlying contract.

(b) Advantages and disadvantages of various types of performance guarantee

111. Fromthe perspective of the contracting authority, monetary performance guarantees may be particularly useful in covering additional costs that may be incurred by the contracting authority as a result of delay or default by the concessionaire. Monetary performance guarantees may also serve as an instrument to put pressure on the concessionaire to complete construction in time and to perform its other obligations in accordance with the requirements of the project agreement. However, the amount of those guarantees is typically only a fraction of the economic value of the obligation guaranteed and is usually not sufficient to cover the cost of engaging a third party to perform instead of the concessionaire or its contractors.

112. From the perspective of the contracting authority, a first-demand guarantee has the advantage of assuring prompt recovery of funds under the guarantee, without evidence of failure to perform by the contractor or of the extent of the beneficiary's loss. Furthermore, guarantors furnishing monetary performance guarantees, in particular banks, prefer first-demand guarantees, as the conditions are clear as to when their liability to pay accrues, and the guarantors will thus not be involved in disputes between the contracting authority and the concessionaire as to whether or not there has been a failure to perform under the project agreement. Another advantage for a bank issuing a first-demand guarantee is the possibility of quick and efficient recovery of the sums paid under a first-demand guarantee by direct access to the concessionaire's assets.

113. A disadvantage to the contracting authority of a first-demand guarantee or a stand-by letter of credit is that those instruments may increase the overall project costs, since the concessionaire is usually obliged to obtain and set aside large counter-guarantees in favour of the institutions issuing the first-demand guarantee or the stand-by letter of credit. Also, a concessionaire that furnishes such a guarantee may wish to take out insurance against the risk of recovery by the contracting authority under the guarantee or the stand-by letter of credit when there has been in fact no failure to perform by the concessionaire and the cost of that insurance is included in the project cost. The concessionaire also may include in the project cost the potential costs of any action that it may need to institute against the contracting authority to obtain the repayment of the sum improperly claimed.

114. A disadvantage to the concessionaire of a first-demand guarantee or a stand-by letter of credit is that, if there is recovery by the contracting authority when there has been no failure to perform by the concessionaire, the latter may suffer immediate loss if the guarantor or the issuer of the letter of credit reimburses itself from the assets of the concessionaire after payment to the contracting authority. The concessionaire may also experience difficulties and delays in recovering from the contracting authority the sum improperly claimed.

115. The terms of an accessory guarantee usually require the beneficiary to prove the failure of the contractor to perform and the extent of the loss suffered by the beneficiary. Furthermore, the defences available to the debtor if it is sued for a failure to perform are also available to the guarantor. Accordingly, there is a risk that the contracting authority may face a protracted dispute when it makes a claim under the bond. In practice, this risk may be reduced, for instance, if the submission of claims under the terms of the bond is subject to a procedure such as that provided in article 7 (j)(i) of the Uniform Rules on Contract Bonds, drawn up by the International Chamber of Commerce.[2] Article 7 (j)(i) of the Uniform Rules provides that notwithstanding any dispute or difference between the principal and the beneficiary in relation to the performance of the contract or any contractual obligation, a default for the purposes of payment of a claim under a contract bond shall be deemed to be established upon issue of a certificate of default by a third party (who may without limitation be an independent architect or engineer or referee) if the bond so provides and the service of such a certificate or a certified copy thereof upon the guarantor. Where such a procedure is adopted, the contracting authority may be entitled to obtain payment under the contract bond event though its entitlement to that payment is disputed by the concessionaire.

116. As a reflection of the lesser risk borne by the guarantor, the monetary limit of liability of the guarantor may be considerably higher than under a first-demand guarantee, thus covering a larger percentage of work under the project agreement. A performance bond may also be advantageous if the contracting authority cannot conveniently arrange for the rectification of faults or completion of construction itself and requires the assistance of a third party to arrange for rectification or completion. Where, however, the construction involves the use of a technology known only to the concessionaire, rectification or completion by a third person may not be feasible and a performance bond may not have the last-mentioned advantage over a monetary performance guarantee. For the concessionaire, accessory guarantees have the advantage of preserving the concessionaire's borrowing power, since accessory guarantees, unlike first-demand guarantees and stand-by letters of credit, do not affect the concessionaire's line of credit with the lenders.

117. It flows from the above considerations that different types of guarantees may be useful in connection with the various obligations assumed by the concessionaire. While it is useful to require the concessionaire to provide adequate guarantees of performance, it is advisable to leave it to the parties to determine the extent to which guarantees are needed and which guarantees should be provided in respect of the various obligations assumed by the concessionaire, rather than requiring in the law only one form of guarantee to the exclusion of others. It should be noted that the project company itself will require a series of performance guarantees to be provided by its contractors (see para. 6) and that additional guarantees to the benefit of the contracting authority usually increase the overall cost and complexity of a project. In some countries, practical guidance provided to domestic contracting authorities advises them to consider carefully whether and under what circumstances such guarantees are required, which specific risks or loss they should cover and which type of guarantee is best suited in each case. The ability of the project company to raise finance for the project may be jeopardized by bond requirements set at an excessive level.

118. One particular problem of privately financed infrastructure projects concerns the duration of the guarantee. The contracting authority may have an interest in obtaining guarantees of performance that remain valid during the entire life of the project, covering both the construction and the operational phase. However, given the long duration of infrastructure projects and the difficulty in evaluating the various risks that may arise, it may be problematic for the guarantor to issue a performance bond for the whole duration of the project or to procure

reinsurance for its obligations under the performance bond. In practice, this problem is compounded by stipulations that the non-renewal of a performance bond constitutes a reason for a call on the bond, so that merely allowing the project company to provide bonds for shorter periods may not be a satisfactory solution. One possible solution, used in some countries, is to require separate bonds for the construction and the operation phase, thus allowing for better assessment of risks and reinsurance prospects. Such a system may be enhanced by defining in precise terms the risk to be covered during the operation period, thus allowing for a better assessment of risks and a reduction of the total amount of the bond. Another possibility to be considered by the contracting authority may be to require the provision of performance guarantees during specific crucial periods, rather than for the entire duration of the project. For instance, a bond might be required during the construction phase and last for an appropriate period beyond completion, so as to cover possible latent defects. Such a bond might then be replaced by a performance bond for a certain number of years of operation, as appropriate in order for the project company to demonstrate its capability to operate the facility in accordance with the required standards. If the project company's performance proves to be satisfactory, the bond requirement might be waived for the remainder of the operation phase, up to a certain period before the end of the concession term, when the project company might be required to place another bond to guarantee its obligations in connection with the handing over of assets and other measures for the orderly wind-up of the project, as appropriate (see chap. V "Duration, extension and termination of the project agreement", ___).

(c) Insurance arrangements

119. Insurance arrangements made in connection with privately financed infrastructure projects typically vary according to the phase to which they apply, with certain types of insurance only being purchased during a particular project phase. Some forms of insurance, such as business interruption insurance, may be purchased by the concessionaire in its own interest, while other forms of insurance may be a requirement under the laws of the host country. Forms of insurance often required by law include insurance coverage against damage to the facility, third-party liability insurance, workers' compensation insurance and pollution and environmental damage insurance.

120. Mandatory insurance policies under the laws of the host country often need to be obtained from a local insurance company or from another institution admitted to operate in the country, which in some cases may pose a number of practical difficulties. In some countries, the type of coverage usually offered may be more limited than the standard coverage available on the international market, in which case the concessionaire may remain exposed to a number of perils that may exceed its self-insurance capacity. That risk is particularly serious in connection with environmental damage insurance. Further difficulties may arise in some countries as a result of limitations on the ability of local insurers to reinsure the risks on the international insurance and reinsurance markets. As a consequence, the project company may often need to procure additional insurance outside the country, thus adding to the overall cost of financing the project.

4. Changes in conditions

121. Privately financed infrastructure projects normally last for a long period of time, during which many circumstances relevant to the project may change. The impact of many changes may be automatically covered in the project agreement, either through financial arrangements such as a tariff structure that includes an indexation clause (see paras. 39-46), or by the assumption by either party, expressly or by exclusion, of certain risks (for example, if the price

of fuel or electricity supply is not taken into account in the indexation mechanisms, then the risk of higher than expected prices is absorbed by the concessionaire). However, there are changes that might not lend themselves easily to inclusion in an automatic adjustment mechanism or that the parties may prefer to exclude from such a mechanism. From a legislative perspective, two particularcategories deserve special attention: legislative or regulatory changes and unexpected changes in economic conditions.

(a) Legislative and regulatory changes

122. Given the long duration of privately financed infrastructure projects, the concessionaire may face additional costs in meeting its obligations under the project agreement because of future, unforeseen changes in legislation applying to its activities. In extreme cases, legislation could even make it financially or physically impossible for the concessionaire to carry on with the project. For the purpose of considering the appropriate solution for dealing with legislative changes, it may be useful to distinguish between legislative changes having a particular incidence on privately financed infrastructure projects or on one specific project, on the one hand, and general legislative changes affecting other economic activities also, and not only infrastructure operation, on the other hand.

123. All business organizations, in the private and public sectors alike, are subject to changes in law and generally have to deal with the consequences that such changes may have for business, including the impact of changes on the price of or demand for their products. Possible examples might include changes in the structure of capital allowances that apply to entire classes of assets, whether owned by the public or private sector and whether related to infrastructure projects or not; regulations that affect the health and safety of construction workers on all construction projects, not just infrastructure projects; and changes in the regulations on the disposal of hazardous substances. General changes in law may be regarded as an ordinary business risk rather than a risk specific to the concessionaire's activities and it may be difficult for the Government to undertake to protect infrastructure operators from the economic and financial consequences of changes in legislation that affect other business organizations equally. Thus, there may not be a *prima facie* reason why the concessionaire should not bear the consequences of general legislative risks, including the risk of costs arising from changes in law applying to the whole business sector.

124. Nevertheless, it is important to take into account possible limitations in the concessionaire's capacity to respond to or absorb cost increases that result from general legislative changes. Infrastructure operators are often subject to service standards and tariff control mechanisms that make it difficult for them to respond to changes in the law in the same manner as other private companies (by increasing tariffs or by reducing services, for example). Where tariff control mechanisms are provided in the project agreement, the concessionaire will seek to obtain assurances from the contracting authority and the regulatory agency, as appropriate, that it will be allowed to recover the additional costs entailed by changes in legislation by means of tariff increases. Where such an assurance cannot be given, it is advisable to empower the contracting authority to negotiate with the concessionaire the compensation to which the concessionaire may be entitled in the event that tariff control measures do not allow for full recovery of the additional costs generated by general legislative changes.

125. A different situation arises when the concessionaire faces increased costs as a result of specific legislative changes that target the particular project, a class of similar projects or privately financed infrastructure projects in general. Such changes cannot be regarded as an ordinary business risk and may significantly alter the economic and financial assumptions

based on which the project agreement was negotiated. Thus, the contracting authority often agrees to bear the additional cost resulting from specific legislation that targets the particular project, a class of similar projects or privately financed infrastructure projects in general. For example, in highways projects, legislation aimed at a specified road project or road operating company, or at that class of privately operated road projects, might result in a tariff adjustment under the relevant provisions in the project agreement.

(b) Changes in economic conditions

126. Some legal systems have rules that allow a revision of the terms of the project agreement following changes in the economic or financial conditions that, without preventing the performance of a party's contractual obligations, render the performance of those obligations substantially more onerous than originally foreseen at the time they were entered into. In some legal systems, the possibility of a revision of the terms of the agreement is generally implied in all Government contracts or is expressly provided for in the relevant legislation.

127. The financial and economic considerations for the concessionaire's investment are negotiated in the light of assumptions based on the circumstances prevailing at the time of the negotiations and the reasonable expectations of the parties as to how those circumstances will evolve during the life of the project. To a certain extent, projections of economic and financial parameters and sometimes even a certain margin of risk, will normally be included in the formulation of the financial proposals by the bidders (see chap. III, "Selection of the concessionaire", para. 68). However, certain events may occur that the parties could not reasonably have anticipated when the project agreement was negotiated and that, had they been taken into account, would have resulted in a different risk allocation or consideration for the concessionaire's investment. Given the long duration of infrastructure projects, it is important to devise mechanisms to deal with the financial and economic impact of such events. Revision rules have been applied in a number of countries and have been found useful to help parties find equitable solutions for ensuring the continued economic and financial viability of infrastructure projects, thus averting a disruptive failure of performance by the concessionaire. However, revision rules may also have some disadvantages, in particular from the perspective of the Government.

128. As with general legislative changes, changes in economic conditions are risks to which most business organizations are exposed without having recourse to a general guarantee of the Government that would protect them against the economic and financial effects of those changes. An unqualified obligation of the contracting authority to compensate the concessionaire for changes of economic conditions may result in a reversion to the public sector of a substantial portion of the commercial risks originally allocated to the concessionaire and represent an open-ended financial liability. Furthermore, it should be noted that the proposed tariff level and the essential elements of risk allocation are important, if not decisive, factors in the selection of the concessionaire. An excessively generous recourse to renegotiation of the project may lead to unrealistically low proposals being submitted during the selection procedure in the expectation of tariff increases once the project has been awarded. Thus, the contracting authority may have an interest in establishing reasonable limits for statutory or contractual provisions authorizing revisions of the project agreement following changes in economic conditions.

129. It may be desirable to provide in the project agreement that a change in circumstances that justifies a revision of the project agreement must have been beyond the control of the concessionaire and of such a nature that the concessionaire could not reasonably be expected to have taken it into account at the time the project agreement was negotiated or to have

avoided or overcome its consequences. For example, a tollroad operator holding an exclusive concession might not be expected to take into account and assume the risk of traffic shortfalls brought about by the subsequent opening of an alternative toll-free road by an entity other than the contracting authority. However, the concessionaire would normally be expected to take into account the possibility of reasonable labour cost increases over the life of the project. Thus, under normal circumstances, the fact that wages turned out to be higher than expected would not be sufficient reason for revising the project agreement.

130. It may also be desirable to provide in the project agreement that a request for revision of the project agreement requires that the alleged changes of economic and financial conditions amount to a certain minimum value in proportion to the total project cost or the concessionaire's revenue. Such a rule might be useful in order to avoid cumbersome adjustment negotiations for small changes until the changes have accumulated to comprise a significant figure. In some countries, there are rules that establish a ceiling for the cumulative amount of periodic revisions of the project agreement. The purpose of such rules is to avoid the misuse of the change mechanism as a means for achieving an overall financial balance that bears no relation to the one contemplated in the original project agreement. From the perspective of the concessionaire and the lenders, however, such limitations may represent exposure to considerable risk in the event, for instance, of dramatic cost increases resulting from an extraordinarily radical change of circumstances. Therefore, both the desirability of introducing a ceiling and the appropriate amount of such ceiling need to be carefully considered.

5. Exemption provisions

131. During the life of an infrastructure project, events may occur that impede the performance by a party of its contractual obligations. The events causing such an impediment are typically outside either party's control and may be of a physical nature, such as a natural disaster, or may be the result of human action, such as war, riots or terrorist attacks. Many legal systems generally recognize that a party that fails to perform a contractual obligation because of the occurrence of certain types of events may be exempted from the consequences of any such failure to perform.

(a) Definition of exempting impediments

132. Exempting impediments typically include occurrences beyond the control of a party that cause the party to be unable to perform its obligation and that the party has been unable to overcome by the exercise of due diligence. Common examples include the following: natural disasters (such as cyclones, floods, droughts, earthquakes, storms, fires or lightning); war (whether declared or not) or other military activity, including riots and civil disturbance; failure or sabotage of facilities, acts of terrorism, criminal damage or the threat of such acts; radioactive or chemical contamination or ionizing radiation; effects of the natural elements, including geological conditions that cannot be foreseen and resisted; and employees' strikes of exceptional importance.

133. Some laws make only a general reference to exempting impediments, whereas other laws contain extensive lists of circumstances that excuse the parties from performance under the project agreement. The latter technique may serve the purpose of ensuring a consistent treatment of the matter for all projects developed under the relevant legislation, thus avoiding situations where one concessionaire obtains a more favourable allocation of risks than that provided in other project agreements. However, it is important to consider the possible disadvantages of setting forth in statutory or regulatory provisions a list of events that are to be considered exempting impediments for all cases. There is a risk that the list might be

incomplete, leaving out important impediments. Furthermore, certain natural disasters, such as storms, cyclones and floods, may be normal conditions at a particular time of the year at the project site. As such, those natural disasters may represent risks that any public service provider acting in the region would be expected to assume.

134. Another aspect that may need to be carefully considered is whether and to what extent certain acts of public authorities other than the contracting authority may constitute exempting impediments. The concessionaire may be required to secure a licence or other official approval for the performance of certain of its obligations. The project agreement might thus provide that, if the licence or approval is refused, or if it is granted but later withdrawn because of the concessionaire's own failure to meet the relevant criteria for the issuance of the licence or approval, the concessionaire cannot rely on the refusal as an exempting impediment. However, if the licence or approval is refused or withdrawn for extraneous or improper motives, it would be equitable to provide that the concessionaire may rely on the refusal as an exempting impediment. A further possibility of impediment might be an interruption of the project brought about by a public authority or organ of government other than the contracting authority, for instance, because of changes in governmental plans and policies that require the interruption or major revision of the project that substantially affect the original design. In such situations, it may be important to consider the institutional relationship between the contracting authority and the public authority that brings about the impediment as well as their degree of independence from one another. An event classified as an exempting impediment may in some cases amount to an outright breach of the project agreement by the contracting authority, depending on whether the contracting authority could reasonably control or influence the acts of the other public authority.

(b) Consequences for the parties

135. During the construction phase, the occurrence of exempting impediments usually justifies an extension of the time allowed for the completion of the facility. In that connection, it is important to consider the implications of any such extension for the overall duration of the project, in particular where the construction phase is taken into account for calculating the total concession period. Delays in the completion of the facility reduce the operational period and may adversely affect the global revenue estimates of the concessionaire and the lenders. It may therefore be advisable to consider under what circumstances it may be justified to extend the concession period so as to take into account possible extensions that occur during the construction phase. Lastly, it is advisable to provide that, if the event in question is of a permanent nature, the parties may have the option to terminate the project agreement (see also chap. V, "Duration, extension and termination of the project agreement", ___).

136. Another important question is whether the concessionaire will be entitled to compensation for loss of revenue or property damage that results from the occurrence of exempting impediments. The answer to that question is given by the risk allocation provided in the project agreement. Except for cases in which the Government provides some form of direct support, privately financed infrastructure projects are typically undertaken at the concessionaire's own risk, including the risk of losses that may result from natural disasters and other exempting impediments, against which the concessionaire is usually required to procure adequate insurance coverage. Thus, some laws expressly exclude any form of compensation to the concessionaire in the event of loss or damage that results from the occurrence of exempting impediments. It does not necessarily follow, however, that an event qualified as an

exempting impediment may not, at the same time, justify a revision of the terms of the project agreement so as to restore its economic and financial balance (see also paras. 126-130).

137. However, a different type of risk allocation is sometimes contemplated for projects involving the construction of facilities that are permanently owned by the contracting authority or facilities that are required to be transferred to the contracting authority at the end of the project period. In some countries, the contracting authority is authorized to make arrangements for assisting the concessionaire to repair or rebuild infrastructure facilities damaged by natural disasters or similar occurrences defined in the project agreement, provided that the possibility of such assistance was contemplated in the request for proposals. Sometimes the contracting authority is authorized to agree to pay compensation to the concessionaire in case of an interruption of the work for more than a certain number of days up to a maximum time limit, if the interruption is caused by an event for which the concessionaire is not responsible.

138. Should the concessionaire become unable to perform because of any such impediment and should the parties fail to achieve an acceptable revision of the contract, some national laws authorize the concessionaire to terminate the project agreement, without prejudice to the compensation that might be due under the circumstances (see chap. V, "Duration, extension and termination of the project agreement", ___).

139. Statutory and contractual provisions on exempting impediments also need to be considered in the light of other rules governing the provision of the service concerned. The law in some legal systems requires public service providers to make every effort to continue providing the service despite the occurrence of circumstances defined as contractual impediments (see paras. 86 and 87). In those cases, it is advisable to consider the extent to which such an obligation may reasonably be imposed on the concessionaire and what compensation may be due for the additional costs and hardship faced by it.

6. Events of default and remedies

140. Generally, there is a wide range of remedies that the parties may agree on to deal with the consequences of default, culminating with termination. The following paragraphs discuss general considerations on events of default and remedies by either party (see paras. 141 and 142). They consider the legislative implication of certain types of remedies intended to rectify the causes of default and preserve the continuity of the project, in particular the intervention of the contracting authority (see paras. 143-146) or the substitution of the concessionaire (see paras. 147-150). The ultimate remedy of terminating the project agreement and the consequences that may result from termination are discussed elsewhere in the *Guide* (see chap. V, "Duration, extension and termination of the project agreement", ___).

(a) General considerations on failures to perform and remedies

141. The remedies for default by the concessionaire typically include those which are customary in construction or long-term service contracts such as forfeiture of guarantees, contractual penalties and liquidated damages.[3] In most cases, such remedies are typically contractual in nature and do not give rise to significant legislative considerations. Nevertheless, it is important to establish adequate procedures for ascertaining failures and giving opportunity for rectifying such failures. In some countries, the imposition of contractual penalties requires findings of official inspections and other procedural steps, including review by senior officials of the contracting authority prior to the imposition of more serious sanctions. Those procedures may be complemented by provisions distinguishing between defects that can be rectified and those which cannot, and setting down the corresponding procedures and remedies. It is usually

advisable to require that the concessionaire be given notice requiring it to remedy the breach within a sufficient period. It may also be advisable to contemplate the payment of penalties or liquidated damages by the concessionaire in the event of non-performance of essential obligations and to clarify that no penalties apply in case of breach of secondary or ancillary obligations and for which other remedies may be obtained under national law. Furthermore, a performance monitoring system that provides for penalties or liquidated damages may be complemented by a scheme of bonuses payable to the concessionaire for improving over agreed terms.

142. While the contracting authority may protect itself against the consequences of default by the concessionaire through a variety of judicially enforceable contractual arrangements, the remedies available to the concessionaire may be subject to a number of limitations under the applicable law. Important limitations may derive from rules of law that recognize the immunity of public authorities from judicial suit and enforcement measures. Depending on the legal nature of the contracting authority or of other public authorities that assume obligations vis-à-vis the concessionaire, the latter may be deprived of the possibility of enforcing measures of execution to secure the fulfilment of obligations entered into by those public entities (see also chap. VI, "Settlement of disputes", ___). This situation makes it the more important to provide mechanisms to protect the concessionaire against the consequences of default by the contracting authority, for example by means of governmental guarantees covering specific events of default or guarantees provided by third parties, such as multilateral lending institutions (see also chap. II, "Project risks and government support", paras. 61-71).

(b) Step-in rights for the contracting authority

143. Some national laws expressly authorize the contracting authority to take over temporarily the operation of the facility, normally in case of failure to perform by the concessionaire, in particular where the contracting authority has a statutory duty to ensure the effective delivery at all times of the service concerned. In some legal systems, such a prerogative is considered to be inherent in most government contracts and may be presumed to exist even without being expressly mentioned in legislation or in the project agreement.

144. It should be noted that the contracting authority's right to intervene, its "step-in right", is an extreme measure. Private investors may fear that the contracting authority may use it, or threaten to use it, in order to impose its own desires about the way in which the service is provided, or even to get control of the project assets. It is therefore advisable to define as clearly as possible the circumstances in which step-in rights can be exercised. It is important to limit the contracting authority's right to intervene to cases of serious failure of services and not merely in case of dissatisfaction with the concessionaire's performance. It may be useful to clarify in the law that the contracting authority's intervention in the project is temporary and is intended to remedy a specific, urgent problem that the concessionaire has failed to remedy. The concessionaire should resume responsibility for service delivery once the emergency situation has been remedied.

145. The contracting authority's ability to step in may be limited in that it may be difficult immediately to identify and engage a subcontractor to carry out the actions that the contracting authority is stepping in to do. Furthermore, frequent interventions carry a risk of the reversion to the contracting authority of risks that have been transferred in the project agreement to the concessionaire. The concessionaire should not rely on the contracting authority to step in to deal with a particular risk instead of handling it itself, as required by the project agreement.

146. It is advisable to clarify in the project agreement which party bears the cost of an intervention by the contracting authority. In most cases, the concessionaire should bear the costs incurred by the contracting authority when the intervention is caused by a performance failure attributable to the concessionaire's own fault. In some cases, to prevent disputes about liability and about the appropriate level of costs, the agreement may authorize the contracting authority to take steps to remedy the problem itself and then charge the actual cost of having done so (including its own administrative costs) to the concessionaire. However, when such intervention takes place following the occurrence of an exempting impediment (see paras. 131-139), the parties might agree on a different solution, depending on how that particular risk has been allocated in the project agreement.

(c) Step-in rights for the lenders and compulsory transfer of the concession

147. During the life of the project situations may arise where, because of default by the concessionaire or the occurrence of an extraordinary event outside the concessionaire's control, it may nevertheless be in the interest of the parties to avert termination of the project (see chap. V, "Duration, extension and termination of the project agreement", ___) by allowing the project to continue under the responsibility of a different concessionaire. The lenders, whose main security is the revenue generated by the project, are particularly concerned about the risk of interruption or termination of the project prior to repayment of the loans. In the event of default of or an impediment affecting the concessionaire, the lenders will be interested in ensuring that the work will not be left incomplete and that the concession will be operated profitably. The contracting authority, too, may be interested in allowing the project to be carried out by a new concessionaire, as an alternative for having to take it over and continue it under its own responsibility.

148. Clauses allowing the lenders to select, with the consent of the contracting authority, a new concessionaire to perform under the existing project agreement have been included in a number of recent agreements for large infrastructure projects. Such clauses are typically supplemented by a direct agreement between the contracting authority and the lenders who are providing finance to the concessionaire. The main purpose of such a direct agreement is to allow the lenders to avert termination by the contracting authority when the concessionaire is in default by substituting a concessionaire that will continue to perform under the project agreement in place of the concessionaire in default. Unlike the contracting authority's right to intervene, which relates to a specific, temporary and urgent failure of the service, lenders' step-in rights are for cases where the concessionaire's failure to provide the service is recurrent or can reasonably be regarded as irremediable. In the experience of countries that have recently made use of such direct agreements, it has been found that the ability to head off termination and provide an alternative concessionaire gives the lenders additional security against default by the concessionaire. At the same time, it provides the contracting authority an opportunity to avoid the disruption entailed by terminating the project agreement, thus maintaining continuity of service.

149. However, in some countries, the implementation of such clauses may face difficulties in the absence of legislative authorization. The concessionaire's inability to carry out its obligations is usually a ground for the contracting authority to take over the operation of the facility or terminate the agreement (see chap. V, "Duration, extension and termination of the project agreement", ___). For the purpose of selecting a new concessionaire to succeed the defaulting one, the contracting authority often needs to follow the same procedures that applied to the selection of the original concessionaire and it might not be possible for the contracting authority to agree in consultation with the lenders on engaging a new concessionaire that has

not been selected pursuant to those procedures. On the other hand, even where the contracting authority is authorized to negotiate with a new concessionaire under emergency conditions, a new project agreement might need to be entered into with the new concessionaire and there may be limitations to its ability to assume the obligations of its predecessor.

150. Therefore, it may be useful to acknowledge in the law the contracting authority's right to enter into agreements with the lenders providing for the appointment, with the consent of the contracting authority, of a new concessionaire to perform under the existing project agreement, when the concessionaire seriously fails to deliver the service required under the project agreement or following the occurrence of other specified events that could justify the termination of the project agreement. The agreement between the contracting authority and the lenders should, *inter alia*, specify the following: the circumstances in which the lenders are permitted to substitute a new concessionaire; the procedures for the substitution of the concessionaire; the grounds for refusal by the contracting authority of a proposed substitute; and the obligations of the lenders to maintain the service at the same standards and on the same terms as required by the project agreement.

Notes

[1] For a discussion of approaches and possible solutions used in construction contracts for complex industrial works, see the *UNCITRAL Legal Guide on Drawing Up Contracts for the Construction of Industrial Works* (United Nation publication, Sales No. E.87.V.10), chap. XXIII, "Variation clauses".

[2] The text of the Uniform Rules on Contract Bonds is reproduced in document A/CN.9/459/Add.1.

[3] For a discussion of remedies used in construction contracts for complex industrial works, see the *UNCITRAL Legal Guide on Drawing Up Contracts for the Construction of Industrial Works*, chap. XVIII, "Delay, defects and other failures to perform".